


STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

FORM 3

AMENDED REPORT ☒**APPLICATION FOR PERMIT TO DRILL**

2. TYPE OF WORK DRILL NEW WELL <input checked="" type="checkbox"/> REENTER P&A WELL <input type="checkbox"/> DEEPEN WELL <input type="checkbox"/>				1. WELL NAME and NUMBER Rocky Ridge 33-1		
4. TYPE OF WELL Oil Well Coalbed Methane Well: NO				3. FIELD OR WILDCAT WILDCAT		
6. NAME OF OPERATOR PYTHON AG, LLC				5. UNIT or COMMUNITIZATION AGREEMENT NAME		
8. ADDRESS OF OPERATOR 717 Alvarado Ave, Davis, CA, 95616				7. OPERATOR PHONE 530 220-3463		
10. MINERAL LEASE NUMBER (FEDERAL, INDIAN, OR STATE) 00172361		11. MINERAL OWNERSHIP FEDERAL <input type="checkbox"/> INDIAN <input type="checkbox"/> STATE <input type="checkbox"/> FEE <input checked="" type="checkbox"/>		9. OPERATOR E-MAIL aantonov@gmail.com		
13. NAME OF SURFACE OWNER (if box 12 = 'fee') Python AG, LLC				12. SURFACE OWNERSHIP FEDERAL <input type="checkbox"/> INDIAN <input type="checkbox"/> STATE <input type="checkbox"/> FEE <input checked="" type="checkbox"/>		
15. ADDRESS OF SURFACE OWNER (if box 12 = 'fee') 717 Alvarado Ave, Davis, CA 95616				14. SURFACE OWNER PHONE (if box 12 = 'fee') 530-220-3463		
17. INDIAN ALLOTTEE OR TRIBE NAME (if box 12 = 'INDIAN')		18. INTEND TO COMMINGLE PRODUCTION FROM MULTIPLE FORMATIONS YES <input type="checkbox"/> (Submit Commingling Application) NO <input checked="" type="checkbox"/>		16. SURFACE OWNER E-MAIL (if box 12 = 'fee') aantonov@gmail.com		
19. SLANT VERTICAL <input checked="" type="checkbox"/> DIRECTIONAL <input type="checkbox"/> HORIZONTAL <input type="checkbox"/>						
20. LOCATION OF WELL	FOOTAGES	QTR-QTR	SECTION	TOWNSHIP	RANGE	MERIDIAN
LOCATION AT SURFACE	375 FNL 1054 FWL	NWNW	33	17.0 S	6.0 W	S
Top of Uppermost Producing Zone	375 FNL 1054 FWL	NWNW	33	17.0 S	6.0 W	S
At Total Depth	375 FNL 1054 FWL	NWNW	33	17.0 S	6.0 W	S
21. COUNTY MILLARD		22. DISTANCE TO NEAREST LEASE LINE (Feet) 375		23. NUMBER OF ACRES IN DRILLING UNIT 40		
		25. DISTANCE TO NEAREST WELL IN SAME POOL (Applied For Drilling or Completed) 0		26. PROPOSED DEPTH MD: 8000 TVD: 8000		
27. ELEVATION - GROUND LEVEL 4604		28. BOND NUMBER 2501468		29. SOURCE OF DRILLING WATER / WATER RIGHTS APPROVAL NUMBER IF APPLICABLE City of Delta		

ATTACHMENTS**VERIFY THE FOLLOWING ARE ATTACHED IN ACCORDANCE WITH THE UTAH OIL AND GAS CONSERVATION GENERAL RULES**

<input checked="" type="checkbox"/> WELL PLAT OR MAP PREPARED BY LICENSED SURVEYOR OR ENGINEER	<input checked="" type="checkbox"/> COMPLETE DRILLING PLAN
<input checked="" type="checkbox"/> AFFIDAVIT OF STATUS OF SURFACE OWNER AGREEMENT (IF FEE SURFACE)	<input type="checkbox"/> FORM 5. IF OPERATOR IS OTHER THAN THE LEASE OWNER
<input type="checkbox"/> DIRECTIONAL SURVEY PLAN (IF DIRECTIONALLY OR HORIZONTALLY DRILLED)	<input checked="" type="checkbox"/> TOPOGRAPHICAL MAP
NAME Steven R. Hash	TITLE Consulting Engineer (Agent)
SIGNATURE	PHONE 918 599-9400
API NUMBER ASSIGNED 43027500010000	DATE 04/14/2010
APPROVAL	EMAIL stevehash@exactengineering.com
 Permit Manager	

Proposed Hole, Casing, and Cement						
String	Hole Size	Casing Size	Top (MD)	Bottom (MD)		
Surf	12.25	9.625	0	1200		
Pipe	Grade	Length	Weight			
	Grade J-55 ST&C	1200	36.0			

CONFIDENTIAL

Proposed Hole, Casing, and Cement						
String	Hole Size	Casing Size	Top (MD)	Bottom (MD)		
Prod	8.75	5.5	0	8000		
Pipe	Grade	Length	Weight			
	Grade N-80 LT&C	5500	17.0			
	Grade N-80 LT&C	2500	20.0			

CONFIDENTIAL

PYTHON AG, LLC.

DRILLING PROGNOSIS

Rocky Ridge 1-33 well
NE NW NW Section 33 –T17S-R06W
Millard Co., Utah

BRIEF DRILLING PLAN

Drill an exploratory well to test the Jurassic Navajo Sandstone formation to a total depth of 8,000'. Well path deviation is the primary drilling concern in this area due to geologic irregularities, dipping beds, faulting, etc. The well path will not be intentionally deviated from vertical to reach a bottom-hole target other than that described herein. An exception to Rule 649-3-2 *Location and Siting of Wells* is herein requested by letter due to geological target objectives. No abnormal pressure or hydrogen sulfide gas is anticipated, however, since this is a wildcat well, the H2S Contingency Plan enclosed and made a part of the drilling plan, will be implemented upon drilling out of the surface casing shoe @ 1200'. The projected surface and bottom hole locations are as follows:

Surface Location:	375' fnl & 1054' fwl of Sec 33 T17S - R06W
BHL @ top of Navajo	(7000' TVD) 375' fnl & 1054' fwl of Sec 33 T17S - R06W
BHL @ total depth	(8000' TVD) 375' fnl & 1054' fwl of Sec 33 T17S - R06W

120 ft of 20 inch conductor casing will be set and cemented to surface before the mud rotary rig is moved in. Then a 12-1/4" hole will be drilled to 1200 ft and 9-5/8" surface casing will be run to TD and cement will be circulated to surface. An 8-3/4" hole section will then be drilled below 9-5/8" csg to 8000'. The well will be logged and if warranted 5-1/2" production casing will be set and cemented a minimum of 500' above any potentially productive interval. A Navajo completion attempt will then likely be made.

EMERGENCY NUMBERS – dial 911 or

Central Valley Medical Center, Nephi	(435) 623-3000
Delta Community Medical Center, Delta	(435) 864-5591
Medical Helicopter – Univ Utah Med Ctr, Salt Lake City	(800) 453-0120
Millard County Sheriff Department, Fillmore	(435) 743-5302
Utah Highway Patrol	(435) 623-1018
Utah Division of Oil, Gas and Mining (Salt Lake City):	(801) 538-5340

Utah Division of Oil, Gas and Mining

Contact Carol Daniels (801) 538-5284, 24 hrs prior to spudding

GENERAL INFORMATION**OBJECTIVE:** Navajo @ 7000' TVD**ELEVATION:** 4604' GR**PROJECTED TOTAL DEPTH:**

8000' TVD; 8000' MD

SURFACE LOCATION:

375' fnl & 1054' fwl of Sec 33 T17S - R06W

COUNTY: Millard**STATE:** Utah

DIRECTIONS TO LOCATION: Take exit #178 from I-15, go south on HW 50 for 3mi, turn right (west) on HW 50 for 18.5 mi, turn left (west) on Deseret Rd (4500 S) for 3.5mi, turn right (north) on 2500 E for 1mi, turn left (west) on 3500 S for ¼ mi, turn south into location 100yds on lease road.

PROPOSED CASING PROGRAM:

Hole Size	Casing Size	Wt./Ft.	Grade	Joint	Measured Depth
12-1/4"	9-5/8"	36.0#	J-55	STC	0' – 1200'
8-3/4"	5-1/2"	17.0#	N-80	LTC	0' – 5500'
	5-1/2"	20.0#	N-80	LTC	5500'-8000'

Hole Size	Casing Size	Drift ID, in.	OD of Couplings	Annular Volume in OH, cf/ft	Annular Volume in Csg, cf/ft	Capacity of casing, cf/ft
12-1/4"	9-5/8"	8.765	10.625	.3132	Na	.4340
8-3/4"	5-1/2"	4.767	6.050	.2526	.2691	.1305

GEOLOGIC FORMATIONS:

Formation	Interval (TVD)	Interval (MD)	Lithology	Prod	Abnormal or H2S
Aluvium	0-150	0-150	Limestone, clay		
North Horn	150-1700	150-1700			
Fish Haven	1700-1900	1700-1900			
Eureka	1900-2000	1900-2000			
Pogonip	2010-3500	2010-3500			
Carbonate	3500-7500	3500-7500			
Sandstone	7500-8000	7500-8000			

CONSTRUCTION OF SURFACE LOCATION

400' x 400' total pad area including pit area
 125' x 150' x 8' Reserve Pit with a 12 mil synthetic liner
 72" diameter tin horn cellar, 6' deep.

SECTION 1 - SURFACE HOLE: 0' to 1200'

Drill a 12-1/4" hole with mud rotary to approximately 1200'. Make hole to fit 9-5/8" casing. Maintain hole angle less than 3 degrees and dogleg severity less than 1.5 degrees per 100 ft.

PRESSURE CONTROL & SAFETY EQUIPMENT FOR SURFACE HOLE

20" drilling nipple

MUD PROGRAM FOR SURFACE HOLE

<u>DEPTH</u>	<u>MUD WEIGHT</u>	<u>TYPE</u>	<u>VISC</u>	<u>FLUID LOSS</u>
0 -1200'	8.4ppg	fresh water	na	na

CASING PROGRAM FOR SURFACE HOLE

<u>DEPTH</u>	<u>SIZE</u>	<u>LENGTH</u>	<u>WT</u>	<u>GRADE</u>	<u>THREAD</u>	<u>REMARKS</u>
0 - 1200'	9-5/8"	1200'	36#	J-55	ST&C	

Casing Running Sequence:

guide shoe, 1 jt of 9-5/8" 36# J55 ST&C, insert float collar, remainder of 9-5/8" 36# J55 ST&C csg to surface. Use centralizers every joint on bottom 3 jts. RU cement co, hold safety meeting, test lines, cement 9-5/8" casing using the cementing guide below. Displace with fresh water.

CEMENTING PROGRAM FOR SURFACE CASING

Lead: 125 sx CBM lite

Mixed at: 10.5 ppg
Yield: 4.12 ft³/sx

Tail: 300 sx Premium Plus

Mixed at: 15.6 ppg
Yield: 1.19 ft³/sx

MUST CIRCULATE CEMENT TO SURFACE If the cement does **not** circulate to surface be prepared to top out with premium cement.

WOC A TOTAL OF 24 HOURS:

Wait 4 hours with the hydrostatic pressure of the displacement fluid in place, then cut off and weld on an 11" 5M x 9-5/8" SOW casing head. NU an 11" 5M double ram BOP w/ 5M annular and 5M choke manifold rigged to mud/gas separator, mud tanks and flare pit.

SECTION 2 - INTERMEDIATE CASING HOLE:

There will not be an intermediate hole section unless severe loss circulation or other hole conditions warrant. If such is encountered, 7" 23ppf casing may be utilized for intermediate casing.

SECTION 3 - PRODUCTION CASING HOLE: 1200' to 8000'

Drill an 8-3/4" hole with a tricone bit, mud motor, MWD & BHA equipment to approximately 8000' beginning by circulating the reserve pit containing freshwater converting to a salt mud system to minimize salt erosion if hole conditions dictate. Mud up as dictated for hole cleaning and electric logging requirements. Loss circulation could be a problem in this interval and, if such occurs, begin pumping LCM pills and if necessary mix into the entire system as needed. Maintain hole angle less than 6 degrees and dogleg severity less than 3 degrees per 100 ft.

PRESSURE CONTROL & SAFETY EQUIPMENT FOR PRODUCTION CASING HOLE

Bottom to Top (see attached 3M BOP diagram)

11" 5M x 9-5/8" SOW casing head w/ (2) 2" LPO
11" 5M x 13-5/8" 5M DSA
13-5/8" x 13-5/8" mud cross with (2) side outlets:
 one outlet 2" kill line
 one outlet 3" choke line
13-5/8" 5M double ram BOP w/ pipe rams top & CSO rams btm
13-5/8" 5M Annular Preventer
13-5/8" 5M rotating head

Connect BOP to 5M choke manifold with pressure gauge
Upper kelly cock valves with handles available
Safety valves and subs to fit all drill string connections in use
Inside BOP or float sub available

Testing Procedure:

Annular Preventer

The annular preventer will be pressure tested to 1500 psi for a period of ten minutes or until provisions of the test are met, whichever is longer. At a minimum, the pressure test will be performed:

- 1) When the annular is initially installed
- 2) Whenever any seal subject to test pressure is broken
- 3) Following related repairs and at 30 day intervals

The annular preventer will be functionally operated once per week.

Blowout Preventer

The BOP, choke manifold and related equipment will be pressure tested to 3000 psi. Pressure will be maintained for a period of at least ten minutes or until the requirements of the test are met, whichever is longer. At a minimum the pressure test will be performed:

- 1) When the BOP is initially installed
- 2) Whenever any seal subject to test pressure is broken
- 3) Following related repairs and at 30 day intervals

The pipe and blind rams will be activated each trip, but not more than once each day. All BOP drills will be recorded in the IADC driller's log.

Accumulator:

The accumulator will have sufficient capacity to open the hydraulically controlled gate valve (if so equipped), close all rams plus the annular preventer, and retain a minimum of 200 psig above pre-charge on the closing manifold without the use of the closing unit pumps. The reservoir capacity will be double the accumulator capacity, and the fluid level will be maintained at the manufacturer's recommendations. The accumulator shall have two (2) independent power sources to close the preventers. Nitrogen bottles may be one of the independent power sources and, if so, shall maintain a charge equal to the manufacturer's specifications.

The accumulator pre-charge pressure test will be conducted prior to connecting the closing unit to the BOP stack and at least once every six months thereafter.

Choke Manifold Equipment, Valves and Remote Controls

All choke lines will be straight lines unless turns use tee blocks or are targeted with running tees, and will be anchored to prevent whip and vibration

A valve will be installed in the closing line as close as possible to the annular preventer to act as a locking device. This valve will be maintained in the open position and will be closed only when the power source for the accumulator is inoperative.

Remote controls shall be readily accessible to the driller. Remote controls will be capable of both opening and closing all preventers. Master controls will be at the accumulator and will be capable of opening and closing all preventers and the choke line valve (if so equipped).

The choke manifold and BOP extension rods with hand wheels will be located outside the rig sub structure. The hydraulic BOP closing unit will be located at least twenty-five feet from the well head but readily accessible to the driller.

A flare line will be installed after the choke manifold, extending 100 feet from the center of the drill hole to a separate flare pit.

MUD PROGRAM FOR PRODUCTION CASING HOLE

DEPTH	MUD WEIGHT	TYPE	VISC	FLUID LOSS
1200' – 2000'	8.5 – 10.4	Fresh/Salt Mud	34 - 55	N/C to 12cc

Convert to a salt gel & sea mud system if salt and gypsum sections are drilled. If loss circulation becomes a problem use LCM sweeps to control seepage & clean hole. As potential pay zones are encountered lower filtrate to 10-12 cc range. Incorporate use of Flowzan polymer for properties

EVALUATION PROGRAM FOR PRODUCTION CASING HOLE

Mudlogger: From surface to TD.

At TD, circulate and condition hole clean for logs. Short trip and monitor well closely. TOH for logs. Run Induction tool as run #1 to determine hole conditions for logging. Adjust tool configurations depending on hole condition.

Electric Logs:

Tool	Surf to TD
SDL/DSN/GR	Yes
DLL/MSFL/SP/GR for brine mud system	Yes
FMI or dipmeter	Yes

CASING PROGRAM FOR PRODUCTION CASING HOLE

DEPTH	SIZE	LENGTH	WT	GRADE	THREAD	REMARKS
0' – 8000'	5-1/2"	8000'	17-20#	N-80	LT&C	

Rig up casing tools and run 5-1/2" production casing as follows:

Float shoe, 2 shoe joints of 5-1/2" 20.0# N-80 LT&C casing, float collar then run balance of casing to surface using bow centralizers across pay intervals.

CEMENT PROGRAM FOR PRODUCTION CASING

Lead: 750 sx 50:50 POZ

Mixed at: 14.35 ppg

Yield: 1.21 ft³/sx

Cement calculated for 2500 ft of fillup @ 1.4 fillup factor. Final calculation to be log caliper plus 15% excess. Displace cement w/ fresh water. Hang casing in slips.

SCHEDULE

Location preparation is presently scheduled to begin on or about June 1, 2010

Drilling operations are anticipated to begin on or about June 15, 2010

<div>5M BOP Stack ---</div>	<div>PRESSURE CONTROL SYSTEM SCHEMATIC</div>	Operator:
	<div>Prepared by: EXACT Engineering, Inc Tulsa, OK (918) 599-9400</div>	Python AG, LLC
		Well name and number
		Rocky Ridge 33-1

Max. anticipated surface pressure 3000 psi

Annular B.O.P. 13-5/8" - 5M WP

B.O.P. pipe Rams 13-5/8" - 5M W.P.
(Pipe/Blind)

B.O.P. blind Rams 13-5/8" - 5M W.P.
(Pipe/Blind)

Check Valve 2" 5M WP

Valve 2" 5M WP

Valve 2" 5M WP

Valve 3" 5M WP

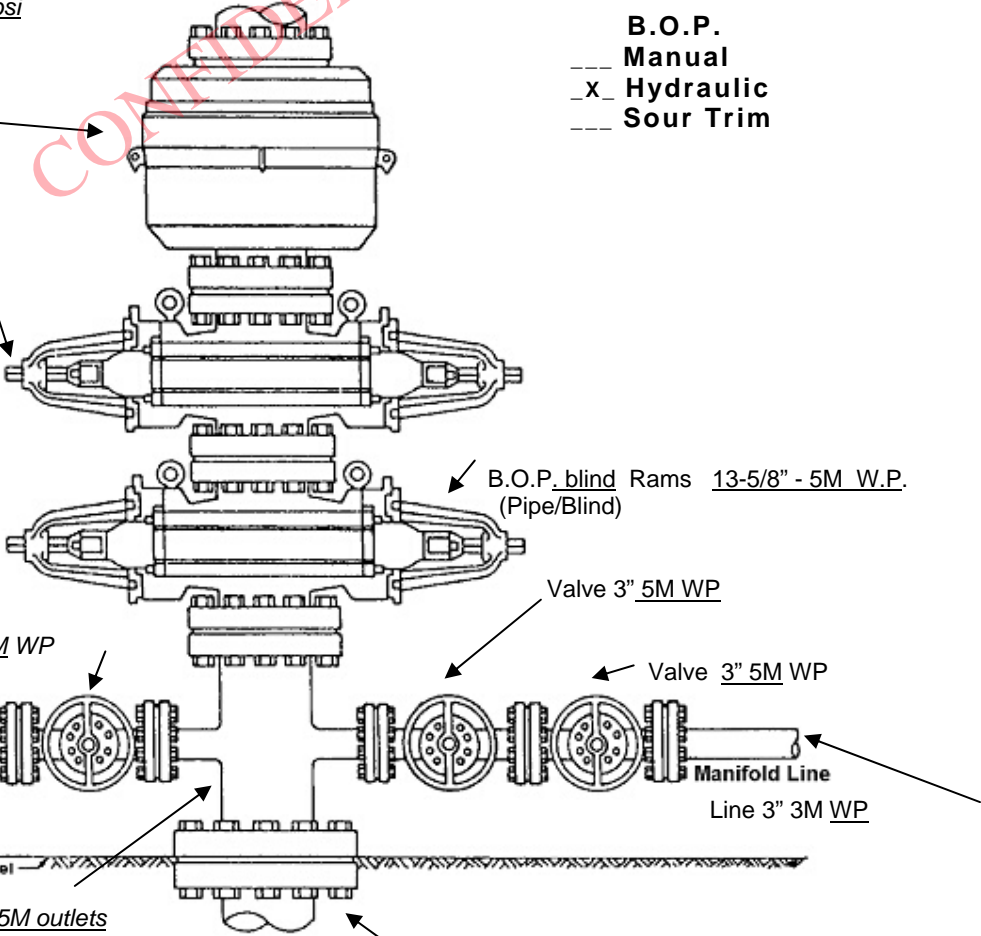
Valve 3" 5M WP

Manifold Line
Line 3" 3M WP

Spool 13-5/8" 5M x 13-5/8" 5M x 2" x 3" 5M outlets

Wellhead 11"53M x 9-5/8" SOW csg head w/
13-5/8" 5M x 11" 5M DSA

B.O.P.
--- Manual
x Hydraulic
--- Sour Trim



APIWellNo:43027500010000'

I, DOUGLAS G. MAGLEBY DO HEREBY CERTIFY THAT I HOLD LICENSE NO. 149021 AS A DULY REGISTERED LAND SURVEYOR IN THE STATE OF UTAH AND THAT THE SURVEY DEPICTED ON THIS PLAT WAS PERFORMED UNDER MY DIRECT SUPERVISION AND TO THE BEST OF MY KNOWLEDGE THE RESULTS OF SAID SURVEY ARE CORRECTLY SHOWN HEREON.

PROFESSIONAL LAND SURVEYOR

DOUGLAS G. MAGLEBY

DOUGLAS G. MAGLEBY

149021

STATE OF UTAH

THE PURPOSE OF THIS SURVEY IS TO PLAT THE LOCATION OF THE PROPOSED WELL FOR "PYTHON AG, LLC - ROCKY RIDGE 33-1 WHICH IS LOCATED IN THE NW 1/4 OF THE NW 1/4 OF SECTION 33, R17S, R6W, SLB6M, MILLARD COUNTY, UTAH

THE BASIS OF BEARING IS UTAH STATE PLANE COORDINATES, CENTRAL
ZONE, DISTANCES ARE GRID, SCALE FACTOR IS 1.000237 TO GROUND.

THE BASIS OF ELEVATION IS THE FIRST ORDER NGS STATION "DELTA NORTHWEST BASE" NAVD 88 ELEVATION 4662.7 FEET.

PROPOSED WELL LOCATION

SECTION CORNER OR 1/4 CORNER

SECTION LINE

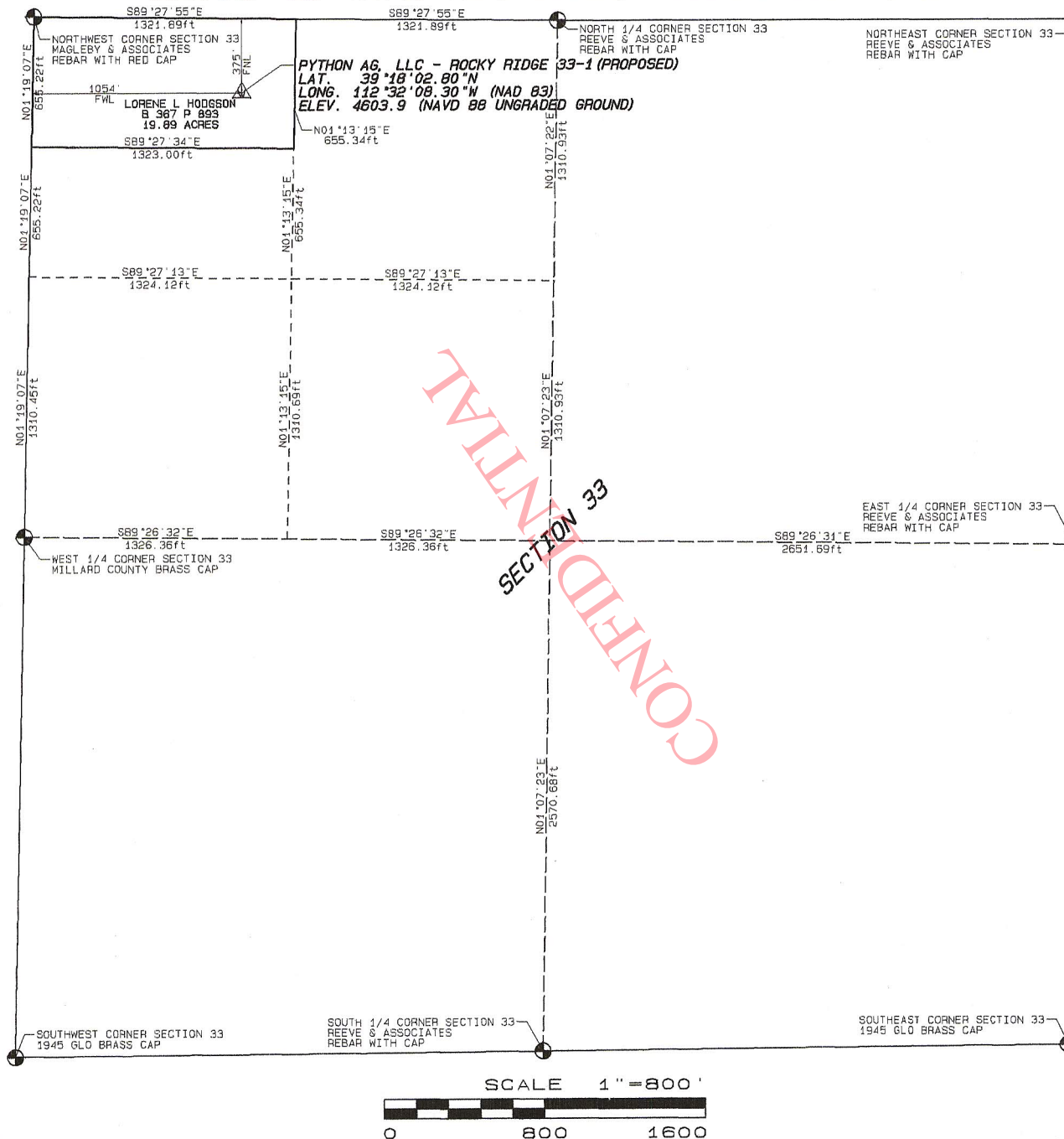
1/4 SECTION LINE

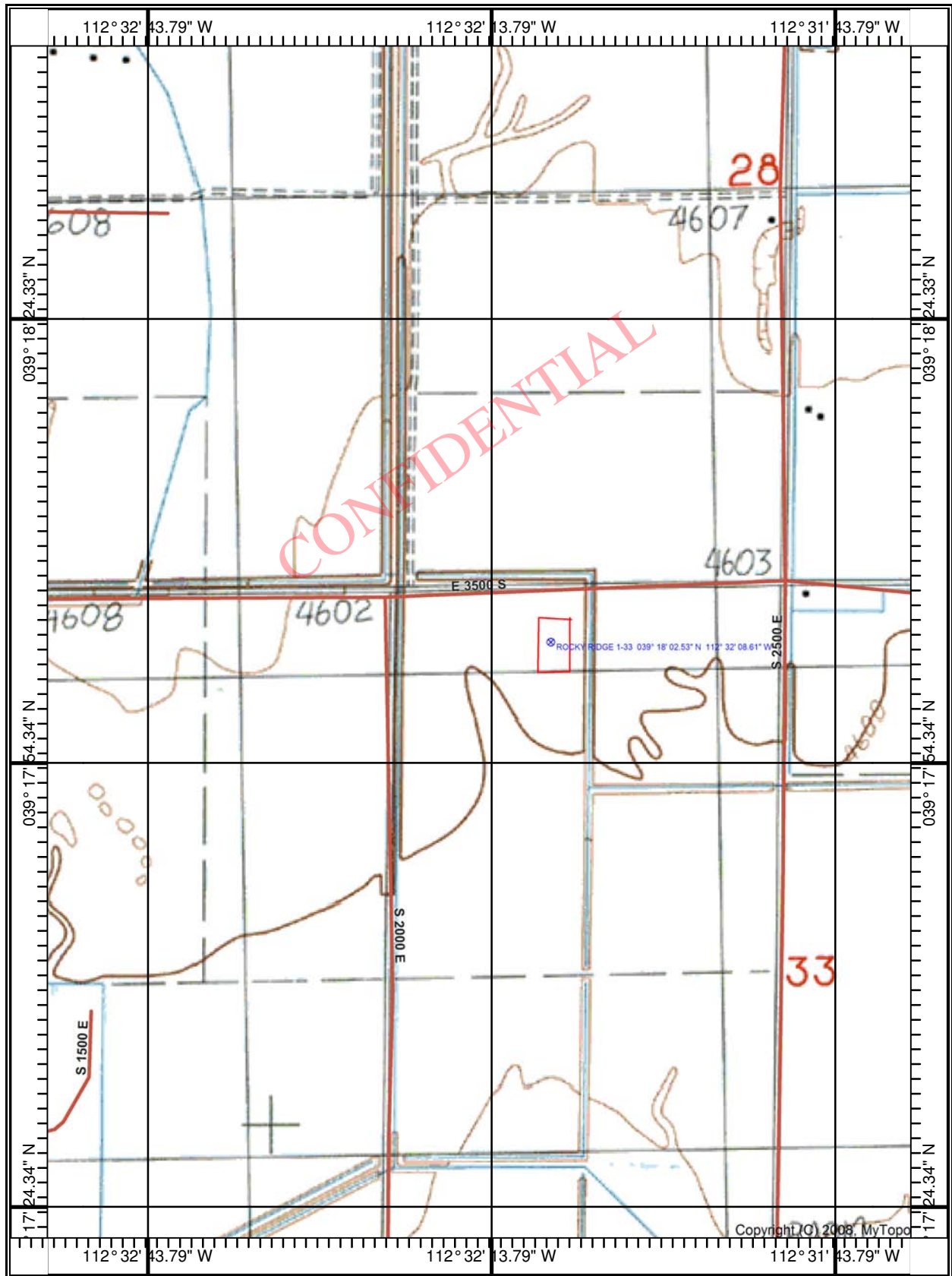
1/16 SECTION LINE (40 ACRE LINE)



415 E. 580 S.
MONROE UT, 84754
(435) 527-3444
(435) 979-5070 CE

DATE 3/19/10

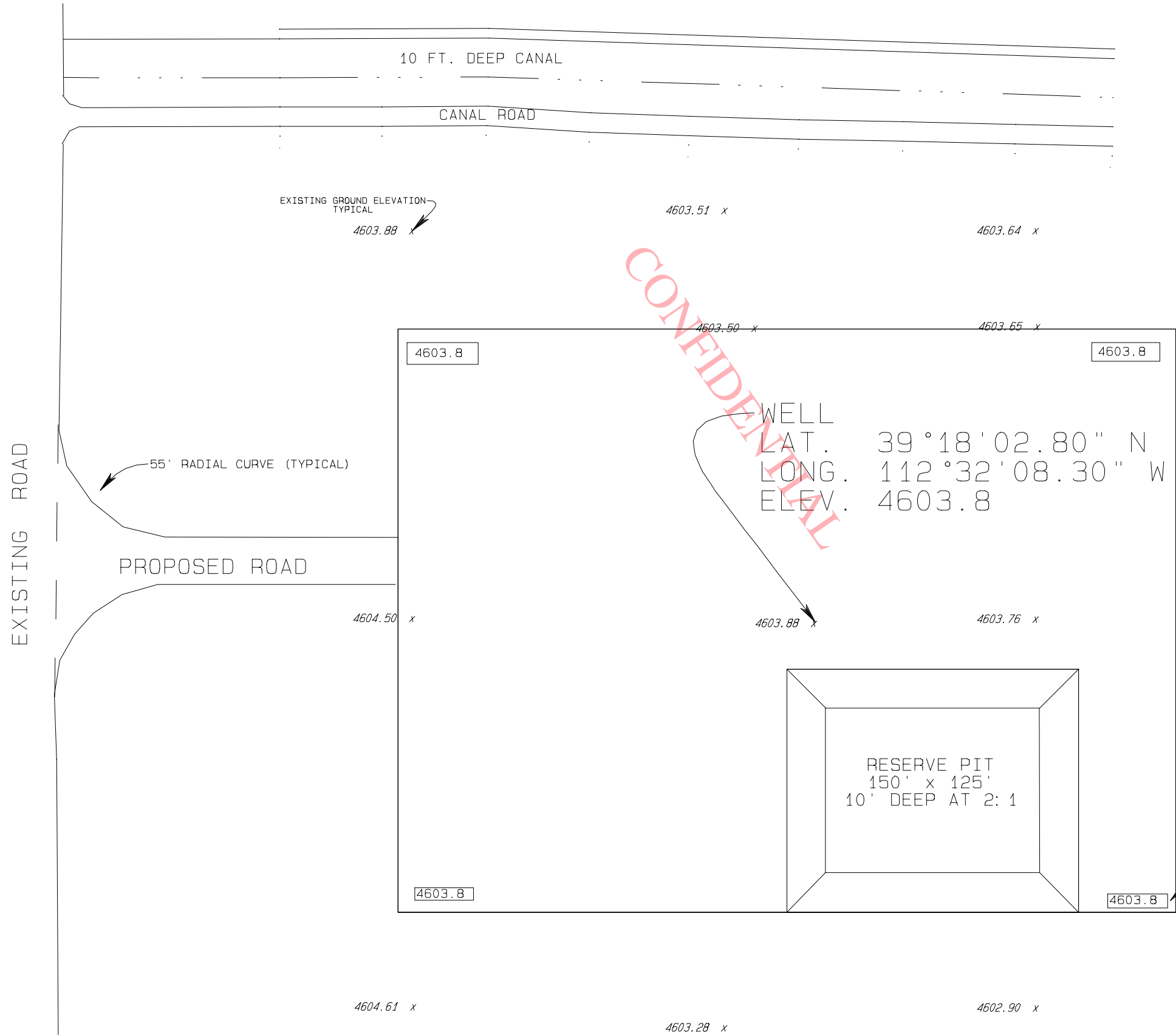




SCALE 1:12000



ROCKY RIDGE 1-33
 LOCATED IN THE NW 1/4 OF THE NW 1/4
 SEC. 33, T. 17 S., R. 6 W., SLB&M
 LAT. 38 18'02.80"N
 LONG. 112 32'08.30"W
 ELEV. 4603.9 (NAVD 88)
 MAP CONTOURS 5 FEET



ESTIMATED EARTHWORK VOLUMES
VOLUMES ARE UNADJUSTED

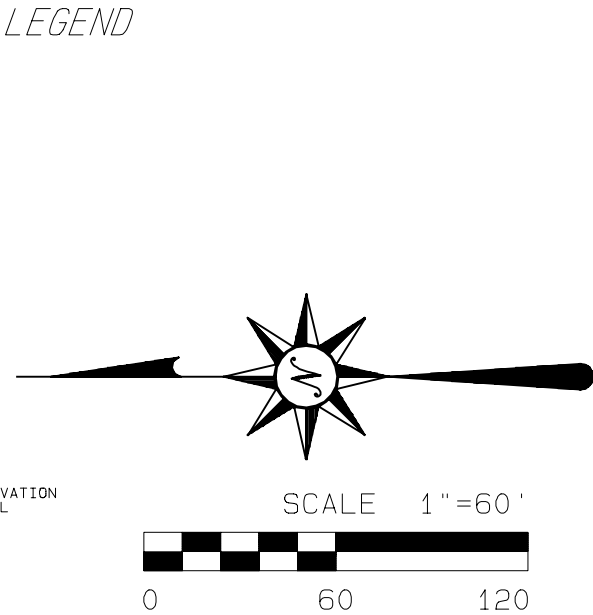
PAD

WELL ELEV: 4603.8
TOTAL CUT: 73 CU. YD.
TOTAL FILL: 73 CU. YD.
NET VOLUME:

PIT

VOLUME: 5050 CU. YD.

- CONTRACTOR NOTES
1. RECLAIM ALL DRAINAGE'S AFTER PROJECT COMPLETION.
 2. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL IMPORTING AND EXPORTING OF SOIL MATERIAL NECESSARY TO COMPLETE THE PROJECT AS DESIGNED
- EARTHWORK CALCULATIONS SHOWN ON THESE PLANS ARE BASED ON THE INPLACE 95% COMPACTION FILL. CONTRACTOR SHALL BE RESPONSIBLE TO DETERMINE SHRINK/SWELL OF EXISTING AND FILL MATERIAL AND FOR ALL EARTHWORK QUANTITIES.



MAGLEBY & ASSOCIATES, INC.
ENGINEERING AND SURVEYING
415 East 580 South, MONROE, UTAH
Telephone (435) 527-3444 or (435) 979-5070 CELL

PYTHON AG, LLC
(Pad & Pit - Rocky Ridge 33-1)
PLAN VIEW

DESIGNED BY: D.M. CHECK: DATE:
DRAWN BY: CHECK: DATE:
QUANTITIES BY: D.M. CHECK: DATE:
REVIEW BY: DATE:

APPROVED BY:
DATE:

SHEET NO.
3

EXACT Engineering, Inc.

20 E. 5th St., Suite 310, Tulsa, OK 74103

www.exactengineering.com

office 918.599.9400 fax 918.599.9401

Steven R. Hash, P.E.
Licensed Professional Engineer
stevehash@exactengineering.com

April 13, 2010

Utah Division of Oil, Gas & Mining
1594 West North Temple, Suite 1210
Salt Lake City, UT 84114-5801

Re: Request for Exception to Rule R649-3-2 – Location and Siting of Vertical Wells
Python AG, LLC – Rocky Ridge 33-1 well
375' FNL and 1054' FWL of Sec 33
NE NW NW Sec 33 T17S – R06W
Millard County, UT

Gentlemen,

On behalf of Python AG, LLC of 717 Alvarado Ave, Davis, CA 95616 (530) 220-3463, we are hereby submitting this letter in accordance with Oil and Gas Conservation Rule 649-3-2 pertaining to *Exception to Location and Siting of Wells*.

Relief is requested for the referenced proposed well due to geologic target constraints. This is an exploratory well and this exception is requested to avoid drilling a purposeful directional well to the geologic target. Python AG, LLC hereby certifies that it is, or it represents, the sole working interest owner(s) within 460 feet of the entire proposed vertical well bore. In fact, Python AG, LLC has under lease agreement all leases for all 160 acre tracts contiguous to the drilling and spacing unit contained within the NW/4 of Sec 33, as shown on the attached plat.

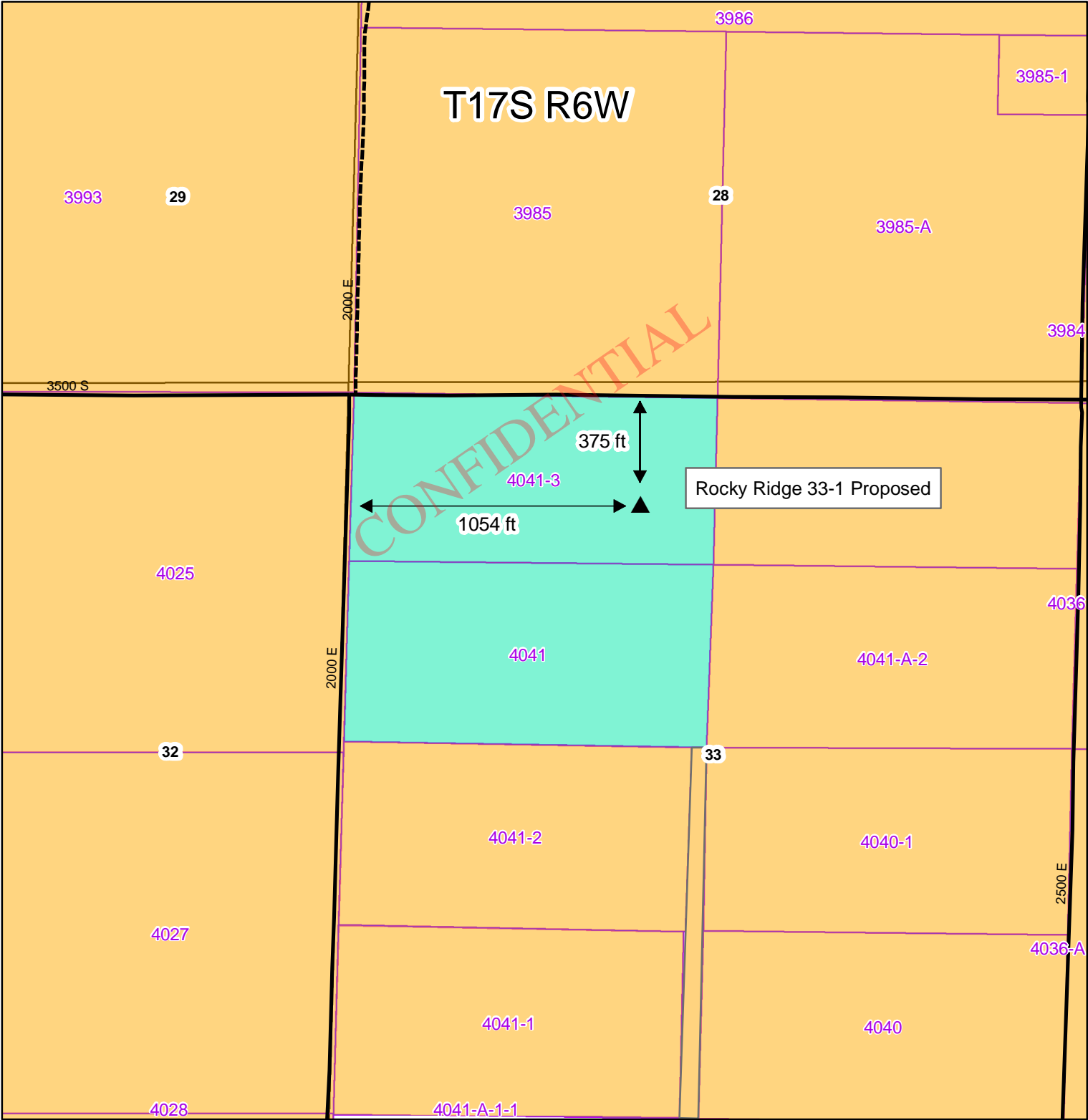
Based upon the information stated herein, Python Ag, LLC respectfully request that this permit be granted pursuant to Rule 649-3-2.

We continue to ask that all information pertaining to this well remain CONFIDENTIAL.

Very Truly Yours,

Steven R. Hash, P.E.
Consulting Engineer

copy: Python AG, LLC; Audrey Antonov
file



▲ Rocky Ridge 33-1 Proposed

Roads

- Limited Access Hwy/Interstate
- US Hwy/Primary Rd
- State Hwy/Secondary Rd
- Local/Rural City Rd
- - - -** Vehicular Trail 4WD only

Land Ownership

- BLM
- Private
- SITLA
- UDWR
- USFS

Leased Parcels

- 40 Ac. Drill Location
- Leased Parcels

1:6,000

Datum NAD 83
Zone 12

Python AG LLC

Rocky Ridge 33-1 Location Exception Plat

WESTERN LAND SERVICES
Richfield, UT 84701 (435) 896-5501

CONFIDENTIAL

Prepared By: **MGC** Date: **March 17, 2010**

WHEN RECORDED, MAIL TO:
Roy B. Moore, P.C. & Associates
428 E. Winchester Street, Suite #140
Salt Lake City, UT 84107-8520

00172773
B: 516 P: 709 Fee \$10.00
Connie Hansen, Millard Recorder
AG 04/13/2010 04:37:40 PM Page 1 of 1
By FIRST AMERICAN TITLE INS

MAIL TAX NOTICE TO:
PYTHON AG, LLC
4320 Via Esperanza,
Santa Barbara, CA 93110

WARRANTY DEED

Lorene L. Hodgson, Grantor, hereby CONVEY(S) and WARRANT(S) to **PYTHON AG, LLC**, Grantee, 4320 Via Esperanza, Santa Barbara, CA 93110, for the sum of Ten Dollars (\$10.00) and other good and valuable consideration, the following described tract of land in Millard County, State of Utah, to wit:

The North ½ of NW 1/4 of NW 1/4 of Section 33, T17S, R6W SLM, located in the State of Utah, County of Millard, (the "Property").

- Together with grants of easement and right of way over Seller's property located in the area of T17S, R6W SLM to public roads for any and all activities of Buyer and or its assigns for the use of the Property.
- Provided, however, that any and all water, oil, gas, mineral and geothermal rights and interests presently owned by Seller including rights to antiquities located on the Property shall be retained by Seller. Provided further, however, that such retention of right by Seller is and shall be subject to that certain Oil and Gas Lease dated February 9, 2010 between Seller as Lessor and Python AG, aka Python AG, LLC, as Lessee recorded as Entry No. 00172361 on Feb. 24, 2010 in the official records of Millard County, Utah.

Subject to all valid easements and rights of way of record.

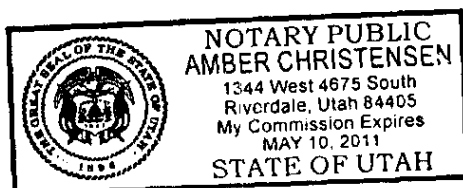
Subject to real estate taxes and assessments for the current year and subsequent years.

Dated this 9th day of April, 2010

Lorene L. Hodgson
Lorene L. Hodgson

STATE OF UTAH)
COUNTY OF Box Elder : ss

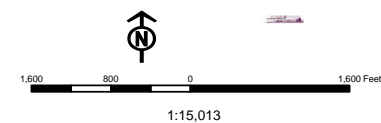
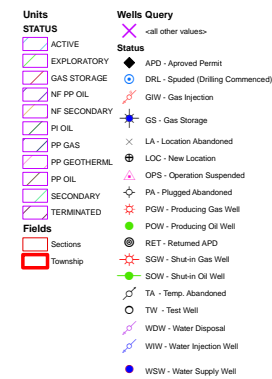
On this 09 day of April, 2010, personally appeared before me Lorene L. Hodgson, who being by me first duly sworn did say that she is the signer of the within instrument and acknowledged to me that she executed the same.



Amber Christensen
NOTARY PUBLIC

API Number: 4302750001
Well Name: Rocky Ridge 33-1
Township 17.0 S Range 06.0 W Section 33
Meridian: SLBM
Operator: PYTHON AG, LLC

Map Prepared:
Map Produced by Diana Mason





Search all of Utah.gov »



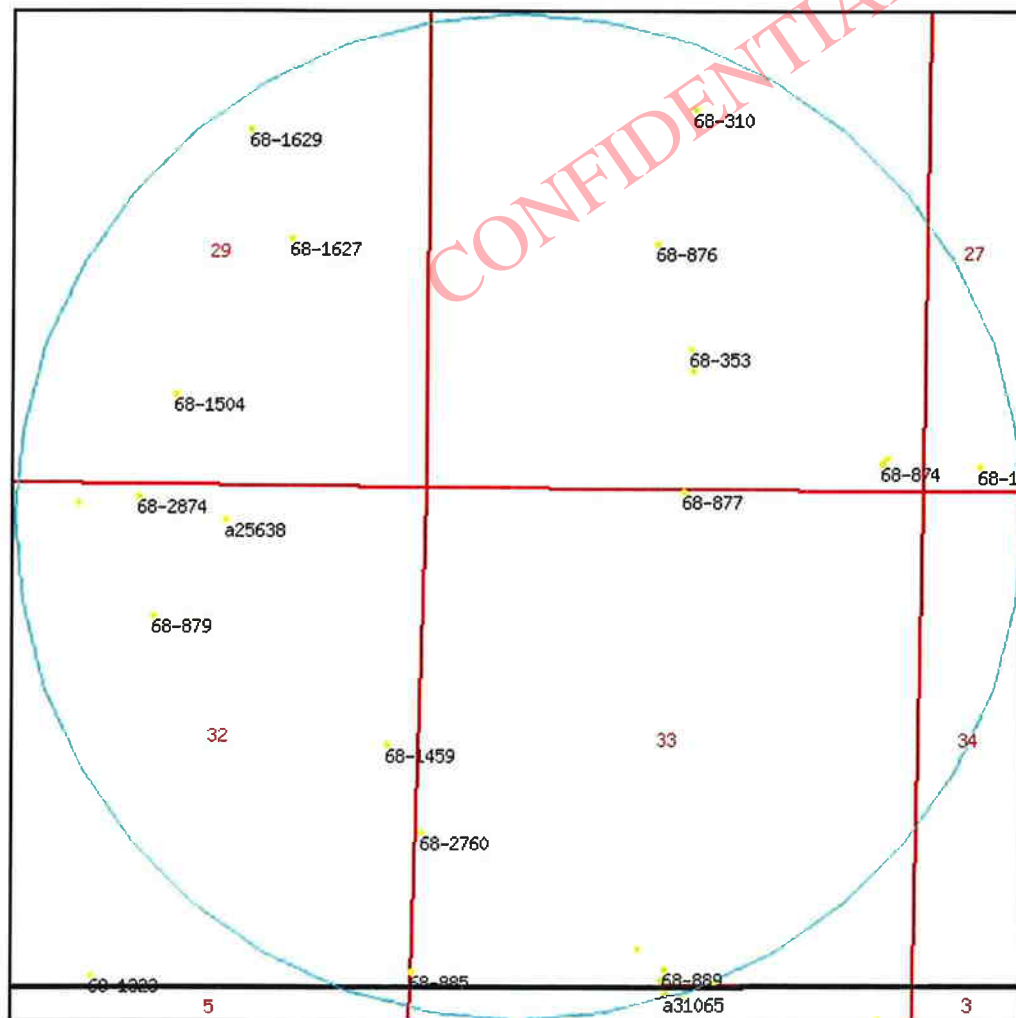
Utah Division of Water Rights

Output Listing

Version: 2009.05.06.00

Rundate: 04/26/2010 01:45 PM

Radius search of 5280 feet from a point S375 E1054 from the NW corner, section 33, Township 17S, Range 6W, SL
b&m Criteria:wrtypes=W,C,E podtypes=S,U,Sp status=U,A,P usetypes=all



0 700 1400 2100 2800 ft

Water Rights

WR Number	Diversion Type/Location	Well Log	Status	Priority	Uses	CFS	ACFT	Owner Name
68-1157	Underground N369 W203 S4 33 17S 6W SL		P	19651101	DO	1.500	0.000	DSC, LLC 790 WEST MAIN
68-1157	Underground		P	19651101	DO	1.500	0.000	DSC, LLC

	N369 W199 S4 33 17S 6W SL					790 WEST MAIN
68-121	Underground N234 W414 SE 28 17S 6W SL	P	19420415 DS	0.015 0.000	FREDERICK BAKER	DELTA UT 84624
68-1312	Underground S149 E272 N4 04 18S 6W SL	P	19140402 DS	0.027 0.000	RUSS AND EDRIA DAY	2412 WEST 3500 SOUTH
68-1323	Underground N114 W615 S4 32 17S 6W SL	P	19150000 DS	0.011 0.000	VERNON L. HOLMAN	BOX 506
68-1459	Underground S122 W258 E4 32 17S 6W SL	P	19140100 DIS	0.022 0.000	E. A. BRUSH	DELTA UT 84624
68-1504	Underground N918 E126 S4 29 17S 6W SL	P	19170000 DIS	0.022 0.000	MANUEL J. AND TERESA A. TRUJILLO	3500 SOUTH 2510 EAST
68-1627	Underground S2757 E1188 N4 29 17S 6W SL	P	19100000 DIS	0.022 0.000	CECIL K. ROSS	DELTA UT 84624
68-1629	Underground S1603 E757 N4 29 17S 6W SL	P	19200000 DIS	0.022 0.000	HARVEY K. AND LINDA F. ROSS	DELTA UT 84624
68-1777	Underground N140 E555 SW 27 17S 6W SL	P	19170000 S	0.015 0.000	DENNIS STEFANOFF	405 SOUTH 150 WEST
68-221	Underground N1160 E2862 SW 28 17S 6W SL	P	19581101 S	0.015 0.000	GARTH J. AND LESLIE A. LAKE	325 NORTH 100 WEST
68-2468	Underground S363 W341 NE 04 18S 6W SL	well info P	1915	DIS 0.000 3.460	THOMAS R. BROWN AND/OR ELAINE M. BROWN	4500 SOUTH 3308 EAST
68-2567	Underground S231 W884 N4 32 17S 6W SL	P	19680315 DI	0.000 1.450	LARRY R. & ANN MARIE WOODS	1321 EAST 3500 SOUTH
68-2760	Underground N1588 E171 SW 33 17S 6W SL	well info P	1911	DIS 0.000 1.730	MYRON E. AND CAROL A. RAWLINSON	4010 SOUTH 2000 EAST
68-2874	Underground S164 W265 N4 32 17S 6W SL	well info P	19680315 DIS	0.000 1.500	ROBERT SCOTT AND KARLA S. HOLMAN	1448 EAST 3500 SOUTH
68-310	Underground S1390 E78 N4 28 17S 6W SL	P	19501230 I	4.500 0.000	DENNIS S. & SUSAN N. STEFANOFF	405 SOUTH 150 WEST
68-353	Underground N1376 W2470 SE 28 17S 6W SL	P	19520402 S	0.015 0.000	ERNEST ANDERSON	OASIS UT 84650
68-622	Underground	P	19630613 D	0.045 0.000	AMERICAN TELEPHONE AND	

	N40 W2615 SE 33 17S 6W SL					TELEGRAPH COMPANY 811 MAIN STREET
68-622	Underground	P	19630613 D	0.045 0.000		AMERICAN TELEPHONE AND TELEGRAPH COMPANY 811 MAIN STREET
	N21 W2051 SE 33 17S 6W SL					
68-874	Underground	P	19110000 DIS	0.022 0.000		FRANCES INVESTMENT COMPANY 801 KEARNS BUILDING
	N175 W464 SE 28 17S 6W SL					
68-876	Underground	P	19110000 DIS	0.027 0.000		FRANCES INVESTMENT COMPANY SALT LAKE CITY UT
	N2497 W170 S4 28 17S 6W SL					
68-877	Underground	well info P	19110000 DIS	0.027 0.000		FRANCES INVESTMENT COMPANY 801 KEARNS BUILDING
	S107 E119 N4 33 17S 6W SL					
68-879	Underground	well info P	19120000 DIS	0.022 0.000		JOAN ALLRED WANBERG 3655 SOUTH 1500 EAST
	S1401 W90 N4 32 17S 6W SL					
68-885	Underground	P	19110000 DIS	0.022 0.000		PHIL WHATCOTT 2015 EAST 4500 SOUTH
	N128 E78 SW 33 17S 6W SL					
68-889	Underground	P	19120000 DS	0.027 0.000		DULUTH LAND COMPANY 801 KEARNS BUILDING
	N159 E75 S4 33 17S 6W SL					
a25638	Underground	well info A	20010404 DIS	0.008 2.000		BARNEY A. DAVIS 1632 E 3500 S
	S400 E660 N4 32 17S 6W SL					
a31065	Underground	well info A	20060214 DI	0.000 0.730		RUSS L. & EDRIA M. DAY 2412 WEST 500 SOUTH
	S100 E100 N4 04 18S 6W SL					



State of Utah

GARY R. HERBERT
Governor

GREG BELL
Lieutenant Governor

Office of the Governor
PUBLIC LANDS POLICY COORDINATION

JOHN HARJA
Director

RECEIVED

MAY 24 2010

DIV. OF OIL, GAS & MINING

May 19, 2010

Gil Hunt
Utah Department of Natural Resources
Division of Oil, Gas and Mining
1594 West North Temple, Suite 1210
Salt Lake City, UT 84114-5801

Subject: Rocky Ridge 33-1 well (wildcat) on Oil Well lease 00172361, Millard County
RDCC Project No. 11334

Dear Mr. Hunt:

The State of Utah, through the Public Lands Policy Coordination Office (PLPCO), has reviewed this project. Utah Code (Section 63J-4-601, *et. seq.*) designates PLPCO as the entity responsible to coordinate the review of technical and policy actions that may affect the physical resources of the state, and to facilitate the exchange of information on those actions among federal, state, and local government agencies. As part of this process, PLPCO makes use of the Resource Development Coordinating Committee (RDCC). The RDCC includes representatives from the state agencies that are generally involved or impacted by public lands management.

Division of Wildlife Resources

The subject oil lease is situated within a triangle connecting three important water bodies that are several miles apart: Clear Lake, DMAD Reservoir, and Gunnison Bend Reservoir. These water bodies attract large numbers of waterfowl, shorebirds, wading birds, and other migrant bird species throughout the year. Species such as the lesser snow goose and American white pelican frequent the area, as there are numerous fields and water features that provide forage and cover.

Any holding ponds for produced water, drilling mud, or other open-pit water features developed in association with oil and gas installations could attract waterfowl and other birds leading to potential negative impacts. Appropriate stipulations for netting, covering, or otherwise deterring bird use of open-water features of oil and gas developments should be incorporated in lease terms. Alternatively, if only closed-pit water systems or enclosed tanks were authorized under the lease, the risk to migratory birds would be greatly reduced or eliminated. The Division of Wildlife Resources encourages the applicant to closely follow lease stipulations designed to protect waterfowl and other migrant birds from negative impacts.

There are no current records within the lease parcel for any Utah sensitive species. However, the lease parcel and surrounding area is suitable for numerous species that use the desert scrub/greasewood habitat type. Sensitive species that could be impacted include the dark kangaroo mouse, ferruginous hawk, kit fox, and burrowing owl. The potential occurrence of the aforementioned sensitive species may warrant wildlife surveys prior to any on-site development. The applicant is also encouraged to report to Division of Wildlife Resources any birds that are found dead or injured as a result of the installation.

The State of Utah appreciates the opportunity to review this proposal and we look forward to working with you on future projects. Please direct any other written questions regarding this correspondence to the Public Lands Policy Coordination Office at the address below, or call Judy Edwards at (801) 537-9023.

Sincerely,

A handwritten signature in black ink, appearing to read 'John Harja', is written over a large, diagonal, red 'CONFIDENTIAL' watermark.

John Harja
Director

H2S Contingency Plan

for

Python AG, LLC

Rocky Ridge #33-1

**Section 33
Township 17S - Range 6W
Millard Co, Utah**

Elevation 4604 ft ASL

**Python AG, LLC
717 Alvarado Ave
Davis, CA 95616
(530) 220-3463**

Table of Contents

Introduction and directions

I. Responsibilities and Duties

- A. All personnel
- B. PYTHON AG, LLC Foreman
- C. Rig Supervisor- Toolpusher
- D. Safety Consultant
- E. Operations Center Foreman

II. Well Location Layout

- A. Location

III. Safety Procedures

- A. Training
- B. Operating Conditions
- C. Evacuation Plan
- D. Emergency Rescue Procedures

IV. H2S Safety Equipment on Drilling Location

V. Well Ignition Procedures

- A. Ignition Equipment
- B. Ignition Procedures

VI. Residents- Public in Radius of Exposure

- A. Map of area around location

VII. Emergency Phone Directory

- A. PYTHON AG, LLC
- B. Emergency Services Phone List

VIII. Reference for Hydrogen Sulfide and Sulfur Dioxide

Introduction

It is the policy of PYTHON AG, LLC to provide a safe and healthful work environment for all of its employees as well as contractors that may work on PYTHON AG, LLC leases. PYTHON AG, LLC makes a continued effort to comply with laws and regulations relative to worker safety and health, and to manage all operations in a manner to reduce risk.

The following is a H2S contingency plan for the PYTHON AG, LLC Rocky Ridge #33-1 well. It is designed for personnel working on this project to follow in case of an accidental release of hydrogen sulfide during drilling and or completion operations. For the plan to be effective, all personnel must review and be familiar with onsite duties as well as the safety equipment involved.

The purpose of this plan is to act as a guideline for personnel working on the wellsite in the event of a sudden release of hydrogen sulfide. All personnel working on the wellsite as well as service personnel that may travel to location on an unscheduled basis must be familiar with this program. The cooperation and participation of all personnel involved with the drilling operation is necessary for this plan to be effective.

Directions to location:

From the jct of HW 6 and HW 50 on the east edge of Delta in Millard County (ALCO store), go 1.9 mi east on HW 50 to 2500E, then turn south on county gravel 3.6 mi to 3500S, then turn west ¼ mile and turn south into location site.

I. Duties & Responsibilities

In order to assure proper execution of the contingency plan, it is essential that one person be responsible for and in complete charge of implementing the procedures outlined in this plan. The order of responsibility will be as follows:

1. PYTHON AG, LLC representative on location - if unable to perform his/ her duties
2. Alternate PYTHON AG, LLC representative - if unable to perform his/ her duties
3. Rig Toolpusher/ Supervisor - if unable to perform his/ her duties
4. Safety consultant representative- if available

A. All Personnel

1. Always be alert for possible H2S alarms- both audible and visual.
2. Be familiar with location of Safe Briefing Areas (SBA) and protective breathing equipment.
3. Develop a "wind awareness". Be aware of prevailing wind direction as well as nearby uphill areas, should there be no wind.
4. Familiarize yourself with nearest escape routes for safe evacuation
5. Should H2S alarm sound, DON'T PANIC - Remain calm and follow instructions of person in charge.
6. If the H2S alarms sound:
 - a. Essential personnel shall don the appropriate respiratory protective equipment and follow company procedures. Essential personnel will continue to wear respiratory protective equipment until the area is deemed safe (H2S concentration less than 10 PPM)
 - b. Non-essential personnel shall evacuate to the appropriate safe briefing area using escape-breathing systems. Wait there for further instructions from PYTHON AG, LLC drilling representative.

C. Initiate rescue protocol if necessary- following training procedures.

B. PYTHON AG, LLC - Foreman

1. The PYTHON AG, LLC foreman will confirm that all personnel on location at any time are trained in H2S safety and aware of above list of duties.

2. The PYTHON AG, LLC foreman will ensure that all personnel observe all safety and emergency procedures.

3. The PYTHON AG, LLC foreman will make an effort to keep the number of personnel on location to a minimum and to ensure that only essential personnel are on location during critical operations.

4. Should and extreme danger condition exist, the PYTHON AG, LLC foreman will:

- a. Assess the situation and advise all personnel by appropriate means of communication.
- b. Be responsible for determining that the extreme danger condition is warranted and the red flag shall be posted at location entrance.
- c. Go to safe briefing area and give clear instructions relative to hazard on location, and actions for personnel to follow.
- d. Notify company and regulatory groups of current situation as outlined in company protocol. Follow appropriate emergency procedures for emergency services notification.
- e. Proceed to rig floor and supervise operations with rig supervisor. Take action to control and reduce the H2S hazard.
- f. Ensure that essential personnel are properly protected with supplied air breathing equipment and that non-essential personnel are in a "poison gas free" area.
- g. Be responsible for authorizing evacuation of persons/ residents in area surrounding the drilling location.
- h. Commence any ignition procedures if ignition criteria are met.

C. Rig Supervisor- Toolpusher

1. If the PYTHON AG, LLC foreman is unable to perform his/ her duties, and the alternate foreman is also unable or unavailable to perform his duties, the drilling rig toolpusher will assume command of wellsite operations and all responsibilities listed above for drilling foreman.

2. Ensure that all rig personnel are properly trained to work in H2S environment and fully understand purpose of H2S alarms, and actions to take when alarms activate. Ensure that all crew personnel understand the buddy system, safe briefing areas, and individual duties as well as emergency evacuation procedures.

3. Should any extreme danger operational condition arise, the rig toolpusher shall assist the PYTHON AG, LLC foreman by:

- a. Proceeding to the rig floor and assist in supervising rig operations.
- b. Ensure that only essential working personnel remain in hazardous areas.
- c. Ensure that all crewmembers that remain in hazardous area, wear respiratory protective equipment until notified that area is "clear" of any toxic gases.
- d. Assign rig crewmember or other service representative to block entrance to location. No unauthorized personnel will be allowed entry to location.
- e. Help to determine hazardous "danger zones" on location using portable detection equipment and position electric fans to move gas in any high concentration areas.

D. Safety Consultant

1. During normal operations (no H2S present), the safety consultant will be responsible for the following:

- a. Ensure that all wellsite safety equipment is in place and operational.
- b. Ensure that all wellsite personnel are familiar with location safety layout and operation of all safety equipment.
- c. Assist the PYTHON AG, LLC foreman in performing weekly H2S drills for location personnel.

2. When an operational condition is classified as extreme danger, the safety consultant will be responsible for the following:

- a. Account for all wellsite personnel
- b. Assess any injuries and direct first aid measure.
- c. Ensure that all safety and monitoring equipment is functioning properly and available.
- d. Monitor the safety of wellsite personnel
- e. Maintain a close communication with PYTHON AG, LLC foreman.
- f. Be prepared to assist PYTHON AG, LLC foreman with support for rig crew or other personnel using breathing equipment.
- g. Be prepared to assist PYTHON AG, LLC foreman with emergency procedures including possible well ignition.
- h. Be prepared to assist with evacuation of any area residents or other personnel working in the immediate area.

E. Operation Center Foreman

1. The PYTHON AG, LLC Operations Center Foreman will be responsible for notifying and maintaining contact with company production manager as well as other company supervisory personnel.

2. Maintain communication with the PYTHON AG, LLC foreman to proceed with any other assistance that might be required.

3. Travel to wellsite if appropriate

4. Assist PYTHON AG, LLC foreman with all other notifications - both company and regulatory.

II. Well Location Layout

A. Location

1. All respiratory protective equipment and H₂S detection equipment will be rigged up prior to drilling the production casing hole section beginning at 10,900' or once the Chinle formation has been encountered. The rig crews and other service personnel will be trained at this time. All rig crews will be trained and all safety equipment in place and functioning prior to drilling below this depth.

2. The drilling rig will be situated on location to allow for the prevailing winds to blow across the rig toward the circulation tanks or at right angles to the lines from the B.O.P.s to the circulation tanks or as near this configuration as possible.

3. The entrance to the location is designed so that it can be barricaded if a hydrogen sulfide emergency condition arises. An auxiliary exit route will be available so that in case of an emergency, a shift in wind direction would not prevent escape from the location.

4. A minimum of 2 safe briefing areas (SBA) shall be designated for assembly of personnel during emergency conditions. These will be located at least 150 ft. or as practical, from the wellbore and in such a location that at least one area will be upwind of the well at all times. Upon recognition of an emergency situation, all personnel will be trained to assemble at the designated briefing area for instructions.

5. Smoking areas will be established and "No Smoking" signs will be posted around the location.

6. Reliable 24 hour telephone communications will be available at the drilling foremen's office.

7. A mud-gas separator will be rigged up and manifolded to the choke system.

8. All equipment that might come in to contact with hydrogen sulfide - drill pipe, drill stem test tools, blowout preventers, casing, choke system will meet PYTHON AG, LLC's metallurgy requirements for H₂S service.

9. The drilling rig will have a continuous electronic H₂S detection system that automatically will activate visible and audible alarms if hydrogen sulfide is detected. The visible light will activate if 10 ppm H₂S is present. The audible siren will activate if 15 ppm H₂S or higher concentration is present. There will be at least 4 H₂S sensors in place on the drilling rig. They will be located to detect the presence of hydrogen sulfide in areas where it is most likely to come to surface. The sensor head locations will be: 1) rig floor by driller's console, 2) substructure area near the bell nipple, 3) the shale shaker, 4) the mud mixing area. Additional sensors will be positioned at the discretion of the drilling foreman. At least 1 light and 1 siren will be placed on the rig to indicate the

presence of hydrogen sulfide. The light and siren will be strategically placed to be visible to all personnel on the drill site. Additional alarm lights & sirens may be added to ensure that all personnel on the drill site are able to notice the alarms at any time.

10. The H₂S detection equipment will be calibrated as recommended by the manufacturer. Calibration records will be maintained on location.

11. A least 4 windsocks will be placed around the drill site to ensure that everyone on the drilling location can readily determine wind direction. One windsock will be mounted on or near the rig floor to be readily visible to rig crews when tripping pipe.

12. All respiratory protective equipment will be NIOSH/ MSHA approved positive pressure type and maintained according to manufacturer's guidelines. All breathing air used for this equipment will be CGA type Grade D breathing air.

13. Both 30-minute self-contained breathing apparatuses (SCBA) and workline units with escape cylinders will be available on location. There will be sufficient numbers of this supplied air breathing equipment on location to ensure that all personnel on location have 1 piece of equipment available to them. All respiratory protective equipment will use nose cups to prevent fogging in temperatures below 32 F. Spectacle kits will be available for personnel that require corrective lenses when working under mask.

14. Electric explosion- proof ventilating fans (bug blowers) will be available to provide air movement in enclosed areas where gas might accumulate.

15. H₂S drills will be conducted at least weekly to ensure that all well site personnel are competent in emergency donning procedures. These drills will be recorded in the driller's log, as well as in the safety trailer logbook.

16. Electronic voice-mikes will be available for essential personnel to use when working under mask to facilitate communication.

17. Additional breathing equipment will be provided for non routine operations that require additional service personnel on the well location to ensure that all personnel on the well location have a dedicated supplied air respirator.

18. Location access will be monitored and controlled during "non- routine" operations such as perforating, pressurized pumping, and well testing. The number of personnel on location will be restricted to "essential" personnel only.

III. Safety Procedures

A. Training

All personnel who come onto the location must be properly trained in hydrogen sulfide, nitrogen, and oxygen deficient atmospheres safety. The personnel shall carry documentation with them indicating that the training has occurred within the previous 12 months. All training will comply with federal and state regulatory guidelines.

Training topics shall include at a minimum:

1. Hazards and characteristics of hydrogen sulfide, nitrogen, and oxygen deficient atmospheres and symptoms of exposure to these gases.
2. Proper use, care and limitations of respiratory protective equipment with hands on practice.
3. Use of both fixed and portable detection toxic gas equipment.
4. Work practices to reduce opportunities for toxic gas exposure as well as confined space procedures.
5. First aid for toxic gas exposure and resuscitation equipment.
6. The buddy system
7. Emergency evacuation procedures
8. A review of the contingency plan for the well.

B. Operating Conditions

A three color- flag warning system will be used to notify personnel approaching the drill site as to operating conditions on the wellsite. This system is in compliance with BLM OO#6 and follows industry standards.

Green Flag - Potential Danger

Yellow Flag - Moderate Danger

Red Flag- Extreme Danger - Do Not approach if red flag is flying.

C. Evacuation Plan

There are no permanent residents within a 1-mile radius of the drill site. The prevailing wind is from the southwest. PYTHON AG, LLC will conduct any evacuation in coordination with the PYTHON AG, LLC Operations Center and with the direction of the PYTHON AG, LLC drilling foreman.

All regulatory agencies will be notified as soon as possible.

D. Emergency Rescue Procedures

Well site personnel should not attempt emergency rescues unless they have been properly trained. A trained person who discovers another person overcome by hydrogen sulfide **should not attempt to rescue without donning the proper breathing equipment.** When making an emergency rescue always use the following procedures:

1. Don rescue breathing equipment before attempting to rescue someone.
2. Remove the victim from the contaminated area to an area free of toxic gas by traveling upwind or cross wind. Be certain that you are in a safe area before removing your breathing equipment.
3. If the victim is not breathing, initiate mouth- to mouth resuscitation immediately. Follow CPR guidelines and replace mouth to mouth with a bag mask resuscitator if available.
4. Treat the victim for shock, keeping the victim warm and calm. Never leave the victim alone.
5. Any personnel who experience hydrogen sulfide exposure must be taken to a hospital for examination and their supervisor notified of the incident.
6. Their supervisor shall follow the company Emergency Preparedness plan.

IV. H2S Safety Equipment on Drilling Location

Item	Amount	Description
1.	1	safety trailer with a cascade system of 10-300 cu. ft bottles of compressed breathing air complete with high-pressure regulators
2.	At least 1000 ft.	Low-pressure airline equipped with Hanson locking fittings. This airline will be rigged up with manifolds to supply breathing air to the rig floor, substructure, derrick, shale shaker area, and mud mixing areas. Three high-pressure refill hoses will be attached to cascade systems for cylinder refill.
3.	Twelve (12)	Scott 30 minute self-contained breathing apparatuses (SCBA).
4.	Twelve (12)	Scott airline units with emergency escape cylinders.
5.	One (1)	4- channel continuous electronic H2S monitor with audible and visual alarms. The set points for these alarms are 10 ppm for the low alarm and 15 ppm for the high alarm.
6.	Two (2)	Sensidyne portable hand operated pump type detection units with tubes for hydrogen sulfide and sulfur dioxide.
7.	One (1)	oxygen resuscitator with spare oxygen cylinder.
8.	One (1)	trauma first aid kit
9.	One (1)	stokes stretcher and one (1) KED.
10.	Four	windsocks
11.	At least one (1)	well condition sign with 3 flag system.
12.	Two (2)	Safe Briefing Area (SBA) signs
13.	One (1)	fire blanket

- | | | |
|-----|-----------|-----------------------------------------------------------------------|
| 14. | One (1) | set air splints |
| 15. | Two (2) | electric explosion proof fans |
| 16. | One (1) | bullhorn and chalk board |
| 17. | Three (3) | 300 cu. ft. air bottles for the safe briefing area. |
| 18. | Two (2) | 30 # fire extinguishers |
| 19. | Six (6) | battery powered voice mikes for communication when wearing air masks. |
| 20. | One (1) | battery powered combustible gas meter |

V. Well Ignition Procedures

If it should become apparent that an uncontrolled release of hydrogen sulfide to the atmosphere might endanger the health and safety of the public or well site personnel, the PYTHON AG, LLC drilling foreman will make a decision to ignite the well. The following procedure should be followed before attempting to ignite the well.

A. Ignition equipment - The following equipment will be available for on-site for use by the ignition team.

1. 2-12 gauge flare guns with flare shells
2. 2-500 ft. Fire resistant retrieval ropes
3. 1 portable combustible gas meter
4. Self contained breathing apparatus (SCBA) for each member of the ignition team.
5. 1 backup vehicle with communication equipment

B. Ignition Procedures

1. The PYTHON AG, LLC drilling foreman will ensure that well site personnel are evacuated to a safe area upwind of the well bore prior to any ignition action.

2. The PYTHON AG, LLC foreman and a designated partner "buddy" backed up by well site safety personnel will comprise the ignition team. All team members will be wearing 30 minute SCBAs.

3. The backup crew will be positioned near a radio-equipped vehicle at a safe distance from the sour gas release. They will standby to rescue the actual team igniting the well.

4. The partner of the ignition team will carry a combustible gas/ hydrogen sulfide meter to continuously monitor the area in which they are working and define the perimeter of the gas cloud.

5. The PYTHON AG, LLC foreman will carry the flare gun and shells.

6. The ignition team will determine the hazardous area and establish safe working perimeters. Once this is identified the team will proceed upwind of the leak and fire into the area with flare gun. If trouble is encountered in trying to light the leak, retry to ignite by firing the flare shells at 45 and 90 angles to the gas source, but DO NOT approach closer to the leak.

7. After ignition, monitor for sulfur dioxide and work with the support group to restrict access to the contaminated area.

VI. Residents - Public in R.O.E.

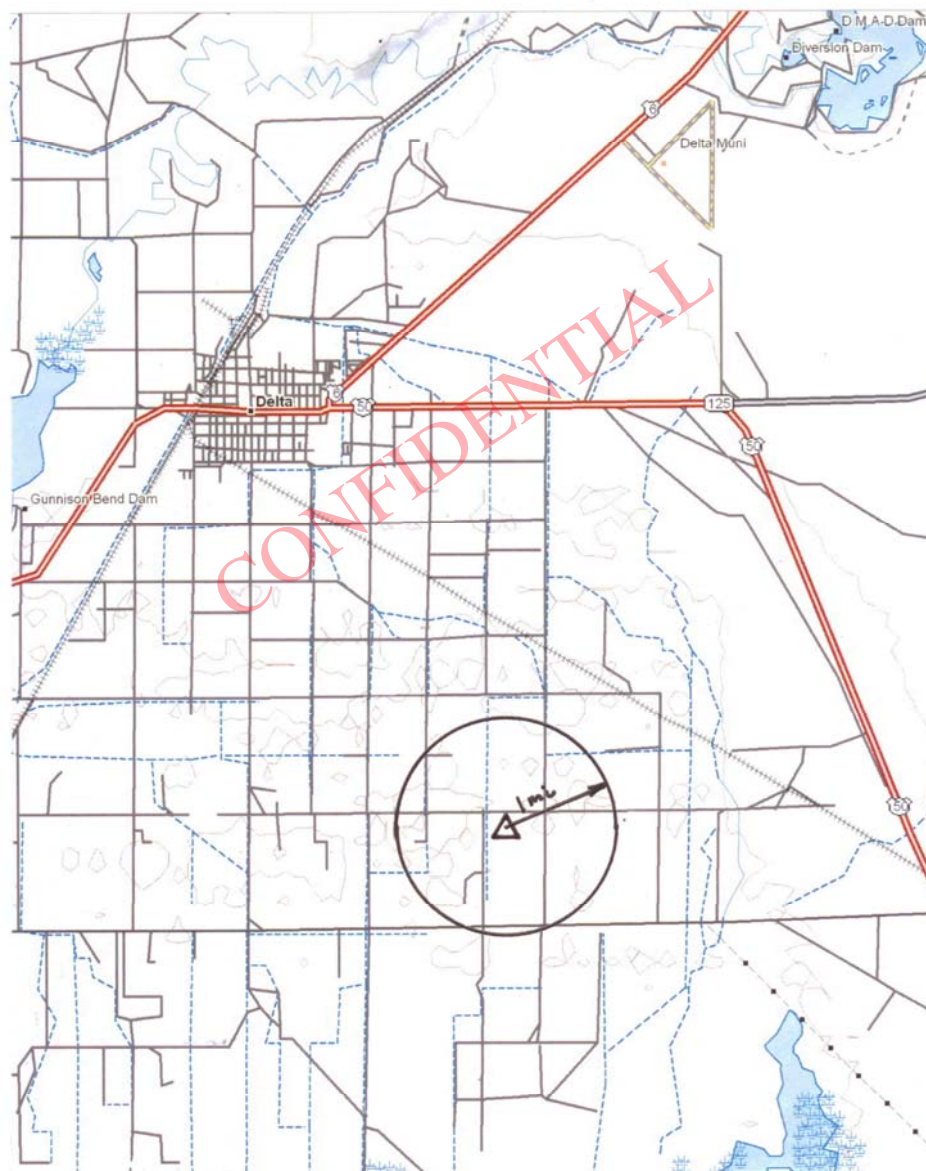
There are no permanent residents within a 1 mile radius of the well site. PYTHON AG, LLC may have personnel working in the area and their contact numbers will be included. The surrounding area is federally and privately owned and maintained. This land may be used for recreational purposes including hunting and recreational vehicles any time during the drilling or completion of this well.

VII. Emergency Phone Directory**PYTHON AG, LLC**

Steve Hash	(Drilling Engineer – EXACT Engineering, Inc)	office 918-599-9400 cell 918-629-9801
Jesse Blanchard	(Area Mgr – Patterson Drilling)	office 435-789-7856 cell 435-828-2649
Darren Naylor	(On Site Rep – Python AG, LLC)	cell 918-645-8007
Andrey Antonov	(Principal – Python AG, LLC)	cell 530-220-3463

B. Emergency Services Phone List

1. Central Valley Medical Center, Nephi, Utah	435-623-3000
2. Delta Community Medical Center, Delta, Utah	435-864-5591
3. Medical Helicopter – Univ Utah Med Ctr, Salt Lake City, Utah	800-453-0120
4. Millard County Sheriff Department, Fillmore, Utah	435-743-5302
5. Utah Highway Patrol	435-623-1018
6. Bureau of Land Management – Richfield, Utah	435-835-2191
7. Utah OSHA (Mark LeBlanc)	801-530-6862
8. Utah Division of Oil, Gas & Mining, Salt Lake City, Utah	801-538-5340



ONE-MILE RADIUS PLAT

Proposed

**Rocky Ridge #33-1 well
Sec 33 T17S R6W
Millard County, UT**

(not to scale)

Prepared by EXACT Engineering, Inc 5/24/2010

**Python AG, LLC
717 Alvarado Ave
Davis, CA 95616
(530) 220-3463**

II A. Location Layout for Workover/ Completion

1. If H₂S is previously determined during drilling operations to exist, all H₂S safety equipment will be available at the time that personnel first move onto the well site. Respiratory protection equipment as well as detection equipment will be on hand should any H₂S gas be detected during the initial rig up period.

PROPERTY OF GAS

If gas should be produced, it could be a mixture of Carbon Dioxide, Hydrogen Sulfide, and Methane.

TOXICITY OF VARIOUS GASES

<u>Common Name</u>	<u>Chemical Formula</u>	<u>Specific Gravity of Air=1</u>	<u>1 Threshold Limit</u>	<u>2 Hazardous Limit</u>	<u>3 Lethal Concern</u>
Hydrogen Cyanide	HCN	0.94	10 ppm	150 ppm/hr	300 ppm
Hydrogen Sulfide	H ₂ S	1.18	10 ppm	250 ppm/hr	600 ppm
Sulfur Dioxide	SO ₂	2.21	2 ppm	-----	1,000 ppm
Chloride	CL ₁	2.45	1 ppm	4 ppm/hr	1,000 ppm
Carbon Monoxide	CO	0.97	50 ppm	400 ppm/hr	1,000 ppm
Carbon Dioxide	CO ₂	1.52	5,000 ppm	5%	10%
Methane	CH ₄	0.55	90,000 ppm	Combustible Above 5% in Air	-----

1 **Threshold**=Concentration at which it is believed that all workers may repeatedly be exposed, day after day, without adverse side effects.

2 **Hazardous**=Concentration that may cause death.

3 **Lethal**=Concentration that will cause death with short-term exposure.

HYDROGEN SULFIDE

GENERAL PROPERTIES

Hydrogen Sulfide itself is a colorless and transparent gas and is flammable. It is heavier than air and, hence, may accumulate in low places.

Although the slightest presence of H₂S in the air is normally detectable by its Characteristic “Rotten Egg” odor, it is dangerous to rely on the odor as a means of detecting excessive concentrations because the sense of smell is rapidly lost allowing lethal concentrations to be accumulated without warning. The following table indicates the poisonous nature of Hydrogen Sulfide, which is more toxic than Carbon Monoxide.

COMMON NAMES: Sour Gas, Rotten Egg Gas, Sulphurated Hydrogen, Hydrogen sulfide, Stink Damp, H₂S, Acid Gas, Sweet Gas*

PHYSICAL-CHEMICAL PROPERTIES

Chemical FormulaH₂S

1. Specific Gravity (Air = 1.000)1.193 (@ 77°F)

2. Color.....None

3. OdorCompared to Rotten Eggs

4. Odor Threshold.....0.13 part of 1 ppm

5. CorrosivityReacts with metals, plastics, tissues and nerves.

6. Solubility in Water4.0 to 1 in H₂O @ 32°F
2.6 to 1 in H₂O @ 68°F

7. Effects on HumansOlfactory nerves, respiratory nerves, irritates sensitive membranes in eyes, nose, and throat.

8. Vapor Pressure.....19.6 atmospheres at 25°C

9. Explosive Limits.....4.3% to 46% by volume in air.

* H₂S is a sweet tasting Gas, but often the word “tasting” is left out.

10. Ignition Temperature.....	18°F (Burns with a pale blue flame)
11. Molecular Weight.....	34.08
12. Conversion Factors.....	1 mg/l of air = 717 ppm (at 25°C and 760 mm HG). 1 ppm = 0.00139 mg/l of air.
13. pH.....	3 in water

INDUSTRIAL OCCURRENCES

Hydrogen Sulfide exposures occur in certain processes in the petroleum industry, chemical plants, chemical laboratories, sulfur and gypsum mines, viscose rayon and rubber industries, tanneries, and in the manufacture of some chemicals, dyes, and pigments. It may be encountered in excavations in the swampy or filled ground. It is produced when sulfur-containing organic matter decomposes, and it can therefore be found in sewage or organic-waste treatment plants. A common sewer gas, it may find its way into utility manhole, particularly dangerous when encountered in tanks, vessels, and other enclosed spaces.

TOXIC PROPERTIES

Hydrogen Sulfide is an extremely toxic and irritating gas. Free Hydrogen Sulfide in the blood reduces its oxygen carrying capacity, thereby depressing the nervous system. Sufficiently high concentrations can cause blockage of the phrenic nerve, resulting in immediate collapse and death due to respiratory failure and asphyxiation.

Because Hydrogen Sulfide is oxidized quite rapidly to sulfates in the body, no permanent after effects occur in cases of recovery from acute exposures unless oxygen deprivation of the nervous system is prolonged. However, in cases of acute exposures, there is always the possibility that pulmonary edema may develop. It is also reported that symptoms such as nervousness, dry nonproductive coughing, nausea, headache, and insomnia, lasting up to about 3 days have occurred after acute exposures to Hydrogen Sulfide.

At low concentrations the predominant effect of Hydrogen Sulfide is on the eyes and respiratory tract. Eye irritation, conjunctivitis, pain, lacrimation, keratitis, and photophobia may persist for several days. Respiratory tract symptoms include coughing, painful breathing, and pain in the nose and throat.

There is no evidence that repeated exposures to Hydrogen Sulfide results in accumulative or systemic poisoning. Effects such as eye irritation, respiratory tract irritation, slow pulse rate, lassitude, digestive disturbances, and cold sweats may occur, but these symptoms disappear in a relatively short time after removal from the exposure. Repeated exposures to Hydrogen Sulfide does not appear to cause any increase or decrease in susceptibility to this gas.

The paralytic effect of Hydrogen Sulfide on the olfactory nerve is probably the most significant property of the gas. This paralysis may create a false sense of security. A worker can be overcome after the typical rotten-egg odor has disappeared. Rather than the characteristic Hydrogen Sulfide odor, some victims of sudden acute overexposure have reported a brief sickeningly sweet odor just prior to unconsciousness.

Subjective olfactory responses to various concentrations of Hydrogen Sulfide have been summarized as follows:

0.02 ppm	No odor
0.13 ppm	Minimal perceptible odor
0.77 ppm	Faint, but readily perceptible odor
4.60 ppm	Easily detectable, moderate odor
27.0 ppm	Strong, unpleasant odor, but not intolerable

Physiological responses to various concentrations of Hydrogen Sulfide have been reported as follows:

10 ppm	Beginning eye irritation
50-100 ppm	Slight conjunctivitis and respiratory tract irritation after 1 hour exposure
100 ppm	Coughing, eye irritation, loss of sense of smell after 2-15 minutes. Altered respiration, pain in the eyes, and drowsiness after 15-30 minutes, followed by throat irritation after 1 hour. Several hours ¹ exposure results in gradual increase in severity of these symptoms and death may occur within the next 48 hours.
200-300 ppm	Marked conjunctivitis and respiratory tract irritation after 1 hour exposure
500-700 ppm	Loss of consciousness and possibly death in 30 minutes.
700 ppm	Raped unconsciousness, cessation of respiration, and death.
1000-2000 ppm	Unconsciousness at once, with early cessation of respiration and death in a few minutes. Death may occur even if individual is removed to fresh air at once.

ACCEPTABLE CONCENTRATIONS

ACCEPTABLE EIGHT-HOUR TIME-WEIGHTED AVERAGE

To avoid discomfort, the Time-Weighted average concentration of Hydrogen Sulfide Shall not exceed 10 ppm.

ACCEPTABLE CEILING CONCENTRATION

The acceptable concentration for protection of health for an eight-hour, five-day week shall be 20 ppm, Fluctuations are to occur below this concentration.

ACCEPTABLE MAXIMUM FOR PEAKS ABOVE ACCEPTABLE BASE LINE FOR CONTINUOUS EXPOSURE

A single-peak concentration not exceeding 50 ppm for a maximum of 10 minutes is allowable provided that the daily time-weighted average is not exceeded.

H₂S EQUIVALENTS

<u>Parts Per Million</u>	<u>Percents</u>	<u>Grains per 100 cu. Ft.</u>
1	.0001	.055
10	.001	.55
18	.0018	1.0
100	.01	5.5
1000	.1	55.5
10000	1.0	555.5

Grains per 100 cu. Ft. = % by volume Mole 636.4
1% by volume = 10,000 ppm

SULFUR DIOXIDE

Sulfur Dioxide (SO₂) is a colorless, transparent gas and is non-flammable.

Sulfur Dioxide is produced during the burning of H₂S. Although SO₂ is heavier than air, it will be picked up by a breeze and carried downwind at elevated temperatures, While Sulfur Dioxide is extremely irritating to the eyes and mucous membranes of the upper respiratory tract, it has exceptionally good warning powers in this respect.

CONCENTRATIONS

EFFECTS

<u>%SO₂</u>	<u>ppm</u>	
.0002	2	Safe for eight (8) hour exposure
.0005	5	Pungent odor-normally a person can detect SO ₂ in this range.
.0012	12	Throat irritation, coughing, constriction of the chest, tearing and smarting of the eyes.
.015	150	So irritating that it can only be endured for a few minutes.
.05	500	Causes a sense of suffocation, even with the first breath.

PHYSICAL PROPERTIES AND CHARACTERISTICS

Chemical Formula	SO ₂
1. Specific Gravity	2.212
2. Color.....	None
3. Flammable	No
4. Odor	Characteristic, pungent, gives ample warning of its presence.
5. Corrosivity	Dry---not corrosive to ordinary metals. Wet---corrosive to most common metals.
6. Allowable Concentrations	2 ppm (ACGIH) 2 ppm (OSHA)
7. Effects on Humans	Irritates eyes, throat and upper Respiratory system.

TOXIC PROPERTIES

Sulfur Dioxide is an irritating gas in its vapor form and the odor is so intensely irritating that concentrations of 3 to 5 parts per million in the air are readily detectable by the normal person. In higher concentrations, the severely irritating effect of the gas makes it unlikely that any person would be able to remain in a Sulfur Dioxide contaminated atmosphere unless they were unconscious or trapped.

Sulfur Dioxide gas is intensely irritating to the eyes, throat, and upper respiratory system. Inhalation of this gas in concentrations of 8 to 12 parts per million in air causes throat irritation, coughing, constriction of the chest, tearing and smarting of the eyes. 150 parts per million is so extremely irritating that it can be endured only for a few minutes. 500 parts per million is so acutely irritating to the upper respiratory tract that it causes a sense of suffocation, even with the first breath.

Out of numerous reported exposures to Sulfur Dioxide, there are few references that would indicate pneumonia as an after effect.

H2S Contingency Plan

for

Python AG, LLC

Rocky Ridge #33-1

**Section 33
Township 17S - Range 6W
Millard Co, Utah**

Elevation 4604 ft ASL

**Python AG, LLC
717 Alvarado Ave
Davis, CA 95616
(530) 220-3463**

Table of Contents

Introduction and directions

I. Responsibilities and Duties

- A. All personnel
- B. PYTHON AG, LLC Foreman
- C. Rig Supervisor- Toolpusher
- D. Safety Consultant
- E. Operations Center Foreman

II. Well Location Layout

- A. Location

III. Safety Procedures

- A. Training
- B. Operating Conditions
- C. Evacuation Plan
- D. Emergency Rescue Procedures

IV. H2S Safety Equipment on Drilling Location

V. Well Ignition Procedures

- A. Ignition Equipment
- B. Ignition Procedures

VI. Residents- Public in Radius of Exposure

- A. Map of area around location

VII. Emergency Phone Directory

- A. PYTHON AG, LLC
- B. Emergency Services Phone List

VIII. Reference for Hydrogen Sulfide and Sulfur Dioxide

Introduction

It is the policy of PYTHON AG, LLC to provide a safe and healthful work environment for all of its employees as well as contractors that may work on PYTHON AG, LLC leases. PYTHON AG, LLC makes a continued effort to comply with laws and regulations relative to worker safety and health, and to manage all operations in a manner to reduce risk.

The following is a H2S contingency plan for the PYTHON AG, LLC Rocky Ridge #33-1 well. It is designed for personnel working on this project to follow in case of an accidental release of hydrogen sulfide during drilling and or completion operations. For the plan to be effective, all personnel must review and be familiar with onsite duties as well as the safety equipment involved.

The purpose of this plan is to act as a guideline for personnel working on the wellsite in the event of a sudden release of hydrogen sulfide. All personnel working on the wellsite as well as service personnel that may travel to location on an unscheduled basis must be familiar with this program. The cooperation and participation of all personnel involved with the drilling operation is necessary for this plan to be effective.

Directions to location:

From the jct of HW 6 and HW 50 on the east edge of Delta in Millard County (ALCO store), go 1.9 mi east on HW 50 to 2500E, then turn south on county gravel 3.6 mi to 3500S, then turn west ¼ mile and turn south into location site.

I. Duties & Responsibilities

In order to assure proper execution of the contingency plan, it is essential that one person be responsible for and in complete charge of implementing the procedures outlined in this plan. The order of responsibility will be as follows:

1. PYTHON AG, LLC representative on location - if unable to perform his/ her duties
2. Alternate PYTHON AG, LLC representative - if unable to perform his/ her duties
3. Rig Toolpusher/ Supervisor - if unable to perform his/ her duties
4. Safety consultant representative- if available

A. All Personnel

1. Always be alert for possible H2S alarms- both audible and visual.
2. Be familiar with location of Safe Briefing Areas (SBA) and protective breathing equipment.
3. Develop a "wind awareness". Be aware of prevailing wind direction as well as nearby uphill areas, should there be no wind.
4. Familiarize yourself with nearest escape routes for safe evacuation
5. Should H2S alarm sound, DON'T PANIC - Remain calm and follow instructions of person in charge.
6. If the H2S alarms sound:
 - a. Essential personnel shall don the appropriate respiratory protective equipment and follow company procedures. Essential personnel will continue to wear respiratory protective equipment until the area is deemed safe (H2S concentration less than 10 PPM)
 - b. Non-essential personnel shall evacuate to the appropriate safe briefing area using escape-breathing systems. Wait there for further instructions from PYTHON AG, LLC drilling representative.

C. Initiate rescue protocol if necessary- following training procedures.

B. PYTHON AG, LLC - Foreman

1. The PYTHON AG, LLC foreman will confirm that all personnel on location at any time are trained in H2S safety and aware of above list of duties.

2. The PYTHON AG, LLC foreman will ensure that all personnel observe all safety and emergency procedures.

3. The PYTHON AG, LLC foreman will make an effort to keep the number of personnel on location to a minimum and to ensure that only essential personnel are on location during critical operations.

4. Should and extreme danger condition exist, the PYTHON AG, LLC foreman will:

- a. Assess the situation and advise all personnel by appropriate means of communication.
- b. Be responsible for determining that the extreme danger condition is warranted and the red flag shall be posted at location entrance.
- c. Go to safe briefing area and give clear instructions relative to hazard on location, and actions for personnel to follow.
- d. Notify company and regulatory groups of current situation as outlined in company protocol. Follow appropriate emergency procedures for emergency services notification.
- e. Proceed to rig floor and supervise operations with rig supervisor. Take action to control and reduce the H2S hazard.
- f. Ensure that essential personnel are properly protected with supplied air breathing equipment and that non-essential personnel are in a "poison gas free" area.
- g. Be responsible for authorizing evacuation of persons/ residents in area surrounding the drilling location.
- h. Commence any ignition procedures if ignition criteria are met.

C. Rig Supervisor- Toolpusher

1. If the PYTHON AG, LLC foreman is unable to perform his/ her duties, and the alternate foreman is also unable or unavailable to perform his duties, the drilling rig toolpusher will assume command of wellsite operations and all responsibilities listed above for drilling foreman.

2. Ensure that all rig personnel are properly trained to work in H2S environment and fully understand purpose of H2S alarms, and actions to take when alarms activate. Ensure that all crew personnel understand the buddy system, safe briefing areas, and individual duties as well as emergency evacuation procedures.

3. Should any extreme danger operational condition arise, the rig toolpusher shall assist the PYTHON AG, LLC foreman by:

- a. Proceeding to the rig floor and assist in supervising rig operations.
- b. Ensure that only essential working personnel remain in hazardous areas.
- c. Ensure that all crewmembers that remain in hazardous area, wear respiratory protective equipment until notified that area is "clear" of any toxic gases.
- d. Assign rig crewmember or other service representative to block entrance to location. No unauthorized personnel will be allowed entry to location.
- e. Help to determine hazardous "danger zones" on location using portable detection equipment and position electric fans to move gas in any high concentration areas.

D. Safety Consultant

1. During normal operations (no H2S present), the safety consultant will be responsible for the following:

- a. Ensure that all wellsite safety equipment is in place and operational.
- b. Ensure that all wellsite personnel are familiar with location safety layout and operation of all safety equipment.
- c. Assist the PYTHON AG, LLC foreman in performing weekly H2S drills for location personnel.

2. When an operational condition is classified as extreme danger, the safety consultant will be responsible for the following:

- a. Account for all wellsite personnel
- b. Assess any injuries and direct first aid measure.
- c. Ensure that all safety and monitoring equipment is functioning properly and available.
- d. Monitor the safety of wellsite personnel
- e. Maintain a close communication with PYTHON AG, LLC foreman.
- f. Be prepared to assist PYTHON AG, LLC foreman with support for rig crew or other personnel using breathing equipment.
- g. Be prepared to assist PYTHON AG, LLC foreman with emergency procedures including possible well ignition.
- h. Be prepared to assist with evacuation of any area residents or other personnel working in the immediate area.

E. Operation Center Foreman

1. The PYTHON AG, LLC Operations Center Foreman will be responsible for notifying and maintaining contact with company production manager as well as other company supervisory personnel.

2. Maintain communication with the PYTHON AG, LLC foreman to proceed with any other assistance that might be required.

3. Travel to wellsite if appropriate

4. Assist PYTHON AG, LLC foreman with all other notifications - both company and regulatory.

II. Well Location Layout

A. Location

1. All respiratory protective equipment and H₂S detection equipment will be rigged up prior to drilling the production casing hole section beginning at 1200'. The rig crews and other service personnel will be trained at this time. All rig crews will be trained and all safety equipment in place and functioning prior to drilling below this depth.

2. The drilling rig will be situated on location to allow for the prevailing winds to blow across the rig toward the circulation tanks or at right angles to the lines from the B.O.P.s to the circulation tanks or as near this configuration as possible.

3. The entrance to the location is designed so that it can be barricaded if a hydrogen sulfide emergency condition arises. An auxiliary exit route will be available so that in case of an emergency, a shift in wind direction would not prevent escape from the location.

4. A minimum of 2 safe briefing areas (SBA) shall be designated for assembly of personnel during emergency conditions. These will be located at least 150 ft. or as practical, from the wellbore and in such a location that at least one area will be upwind of the well at all times. Upon recognition of an emergency situation, all personnel will be trained to assemble at the designated briefing area for instructions.

5. Smoking areas will be established and "No Smoking" signs will be posted around the location.

6. Reliable 24 hour telephone communications will be available at the drilling foremen's office.

7. A mud-gas separator will be rigged up and manifolded to the choke system.

8. All equipment that might come in to contact with hydrogen sulfide - drill pipe, drill stem test tools, blowout preventers, casing, choke system will meet PYTHON AG, LLC's metallurgy requirements for H₂S service.

9. The drilling rig will have a continuous electronic H₂S detection system that automatically will activate visible and audible alarms if hydrogen sulfide is detected. The visible light will activate if 10 ppm H₂S is present. The audible siren will activate if 15 ppm H₂S or higher concentration is present. There will be at least 4 H₂S sensors in place on the drilling rig. They will be located to detect the presence of hydrogen sulfide in areas where it is most likely to come to surface. The sensor head locations will be: 1) rig floor by driller's console, 2) substructure area near the bell nipple, 3) the shale shaker, 4) the mud mixing area. Additional sensors will be positioned at the discretion of the drilling foreman. At least 1 light and 1 siren will be placed on the rig to indicate the

presence of hydrogen sulfide. The light and siren will be strategically placed to be visible to all personnel on the drill site. Additional alarm lights & sirens may be added to ensure that all personnel on the drill site are able to notice the alarms at any time.

10. The H₂S detection equipment will be calibrated as recommended by the manufacturer. Calibration records will be maintained on location.

11. A least 4 windsocks will be placed around the drill site to ensure that everyone on the drilling location can readily determine wind direction. One windsock will be mounted on or near the rig floor to be readily visible to rig crews when tripping pipe.

12. All respiratory protective equipment will be NIOSH/ MSHA approved positive pressure type and maintained according to manufacturer's guidelines. All breathing air used for this equipment will be CGA type Grade D breathing air.

13. Both 30-minute self-contained breathing apparatuses (SCBA) and workline units with escape cylinders will be available on location. There will be sufficient numbers of this supplied air breathing equipment on location to ensure that all personnel on location have 1 piece of equipment available to them. All respiratory protective equipment will use nose cups to prevent fogging in temperatures below 32 F. Spectacle kits will be available for personnel that require corrective lenses when working under mask.

14. Electric explosion- proof ventilating fans (bug blowers) will be available to provide air movement in enclosed areas where gas might accumulate.

15. H₂S drills will be conducted at least weekly to ensure that all well site personnel are competent in emergency donning procedures. These drills will be recorded in the driller's log, as well as in the safety trailer logbook.

16. Electronic voice-mikes will be available for essential personnel to use when working under mask to facilitate communication.

17. Additional breathing equipment will be provided for non routine operations that require additional service personnel on the well location to ensure that all personnel on the well location have a dedicated supplied air respirator.

18. Location access will be monitored and controlled during "non- routine" operations such as perforating, pressurized pumping, and well testing. The number of personnel on location will be restricted to "essential" personnel only.

III. Safety Procedures

A. Training

All personnel who come onto the location must be properly trained in hydrogen sulfide, nitrogen, and oxygen deficient atmospheres safety. The personnel shall carry documentation with them indicating that the training has occurred within the previous 12 months. All training will comply with federal and state regulatory guidelines.

Training topics shall include at a minimum:

1. Hazards and characteristics of hydrogen sulfide, nitrogen, and oxygen deficient atmospheres and symptoms of exposure to these gases.
2. Proper use, care and limitations of respiratory protective equipment with hands on practice.
3. Use of both fixed and portable detection toxic gas equipment.
4. Work practices to reduce opportunities for toxic gas exposure as well as confined space procedures.
5. First aid for toxic gas exposure and resuscitation equipment.
6. The buddy system
7. Emergency evacuation procedures
8. A review of the contingency plan for the well.

B. Operating Conditions

A three color- flag warning system will be used to notify personnel approaching the drill site as to operating conditions on the wellsite. This system is in compliance with BLM OO#6 and follows industry standards.

Green Flag - Potential Danger

Yellow Flag - Moderate Danger

Red Flag- Extreme Danger - Do Not approach if red flag is flying.

' A P I W e 1 1 N o : 4 3 0 2 7 5 0 0 0 1 0 0 0 0 '

C. Evacuation Plan

There are no permanent residents within a 1-mile radius of the drill site. The prevailing wind is from the southwest. PYTHON AG, LLC will conduct any evacuation in coordination with the PYTHON AG, LLC Operations Center and with the direction of the PYTHON AG, LLC drilling foreman.

All regulatory agencies will be notified as soon as possible.

D. Emergency Rescue Procedures

Well site personnel should not attempt emergency rescues unless they have been properly trained. A trained person who discovers another person overcome by hydrogen sulfide **should not attempt to rescue without donning the proper breathing equipment**. When making an emergency rescue always use the following procedures:

1. Don rescue breathing equipment before attempting to rescue someone.
2. Remove the victim from the contaminated area to an area free of toxic gas by traveling upwind or cross wind. Be certain that you are in a safe area before removing your breathing equipment.
3. If the victim is not breathing, initiate mouth- to mouth resuscitation immediately. Follow CPR guidelines and replace mouth to mouth with a bag mask resuscitator if available.
4. Treat the victim for shock, keeping the victim warm and calm. Never leave the victim alone.
5. Any personnel who experience hydrogen sulfide exposure must be taken to a hospital for examination and their supervisor notified of the incident.
6. Their supervisor shall follow the company Emergency Preparedness plan.

IV. H2S Safety Equipment on Drilling Location

Item	Amount	Description
1.	1	safety trailer with a cascade system of 10-300 cu. ft bottles of compressed breathing air complete with high-pressure regulators
2.	At least 1000 ft.	Low-pressure airline equipped with Hanson locking fittings. This airline will be rigged up with manifolds to supply breathing air to the rig floor, substructure, derrick, shale shaker area, and mud mixing areas. Three high-pressure refill hoses will be attached to cascade systems for cylinder refill.
3.	Twelve (12)	Scott 30 minute self-contained breathing apparatuses (SCBA).
4.	Twelve (12)	Scott airline units with emergency escape cylinders.
5.	One (1)	4- channel continuous electronic H2S monitor with audible and visual alarms. The set points for these alarms are 10 ppm for the low alarm and 15 ppm for the high alarm.
6.	Two (2)	Sensidyne portable hand operated pump type detection units with tubes for hydrogen sulfide and sulfur dioxide.
7.	One (1)	oxygen resuscitator with spare oxygen cylinder.
8.	One (1)	trauma first aid kit
9.	One (1)	stokes stretcher and one (1) KED.
10.	Four	windsocks
11.	At least one (1)	well condition sign with 3 flag system.
12.	Two (2)	Safe Briefing Area (SBA) signs
13.	One (1)	fire blanket

- | | | |
|-----|-----------|-----------------------------------------------------------------------|
| 14. | One (1) | set air splints |
| 15. | Two (2) | electric explosion proof fans |
| 16. | One (1) | bullhorn and chalk board |
| 17. | Three (3) | 300 cu. ft. air bottles for the safe briefing area. |
| 18. | Two (2) | 30 # fire extinguishers |
| 19. | Six (6) | battery powered voice mikes for communication when wearing air masks. |
| 20. | One (1) | battery powered combustible gas meter |

V. Well Ignition Procedures

If it should become apparent that an uncontrolled release of hydrogen sulfide to the atmosphere might endanger the health and safety of the public or well site personnel, the PYTHON AG, LLC drilling foreman will make a decision to ignite the well. The following procedure should be followed before attempting to ignite the well.

A. Ignition equipment - The following equipment will be available for on-site for use by the ignition team.

1. 2-12 gauge flare guns with flare shells
2. 2-500 ft. Fire resistant retrieval ropes
3. 1 portable combustible gas meter
4. Self contained breathing apparatus (SCBA) for each member of the ignition team.
5. 1 backup vehicle with communication equipment

B. Ignition Procedures

1. The PYTHON AG, LLC drilling foreman will ensure that well site personnel are evacuated to a safe area upwind of the well bore prior to any ignition action.

2. The PYTHON AG, LLC foreman and a designated partner "buddy" backed up by well site safety personnel will comprise the ignition team. All team members will be wearing 30 minute SCBAs.

3. The backup crew will be positioned near a radio-equipped vehicle at a safe distance from the sour gas release. They will standby to rescue the actual team igniting the well.

4. The partner of the ignition team will carry a combustible gas/ hydrogen sulfide meter to continuously monitor the area in which they are working and define the perimeter of the gas cloud.

5. The PYTHON AG, LLC foreman will carry the flare gun and shells.

6. The ignition team will determine the hazardous area and establish safe working perimeters. Once this is identified the team will proceed upwind of the leak and fire into the area with flare gun. If trouble is encountered in trying to light the leak, retry to ignite by firing the flare shells at 45 and 90 angles to the gas source, but DO NOT approach closer to the leak.

7. After ignition, monitor for sulfur dioxide and work with the support group to restrict access to the contaminated area.

VI. Residents - Public in R.O.E.

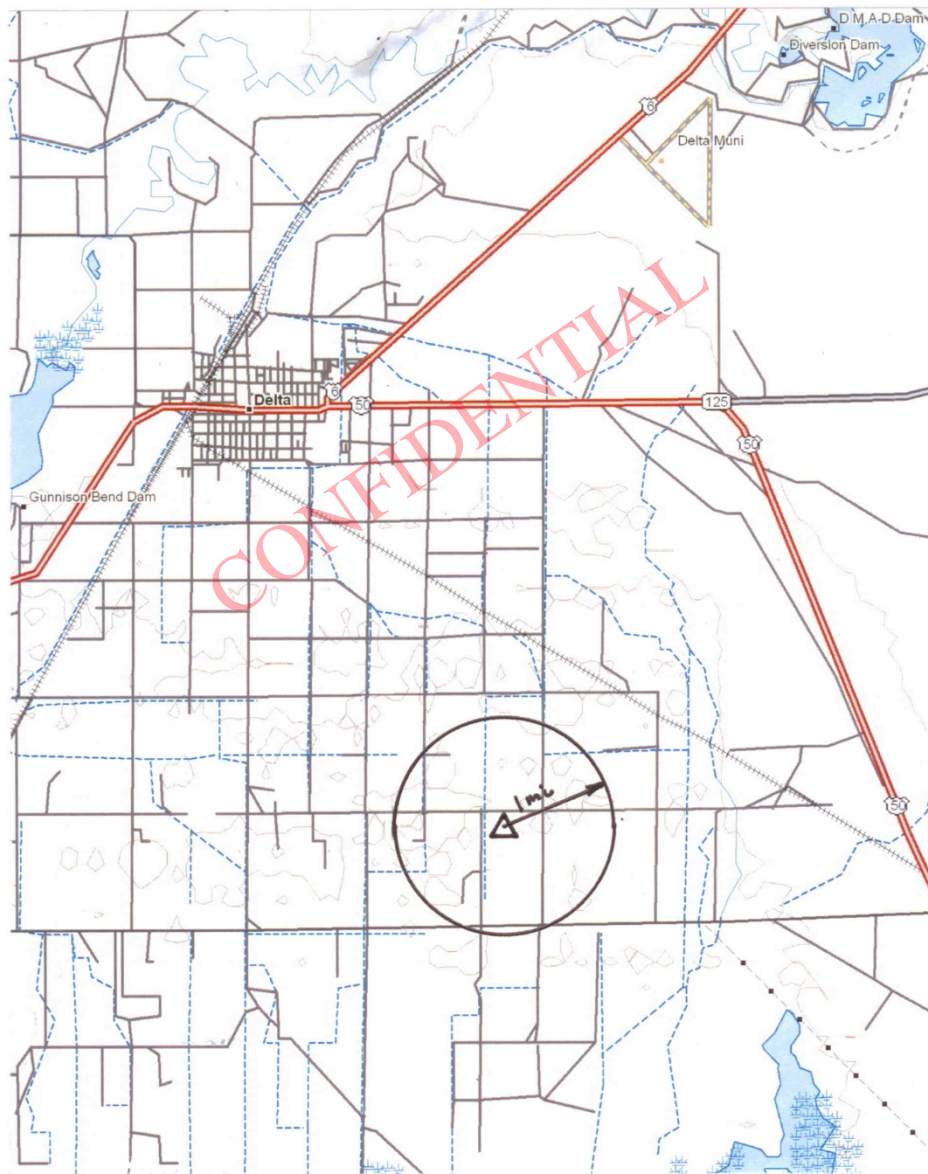
There are no permanent residents within a 1 mile radius of the well site. PYTHON AG, LLC may have personnel working in the area and their contact numbers will be included. The surrounding area is federally and privately owned and maintained. This land may be used for recreational purposes including hunting and recreational vehicles any time during the drilling or completion of this well.

VII. Emergency Phone Directory**PYTHON AG, LLC**

Steve Hash	(Drilling Engineer – EXACT Engineering, Inc)	office 918-599-9400 cell 918-629-9801
Jesse Blanchard	(Area Mgr – Patterson Drilling)	office 435-789-7856 cell 435-828-2649
Darren Naylor	(On Site Rep – Python AG, LLC)	cell 918-645-8007
Andrey Antonov	(Principal – Python AG, LLC)	cell 530-220-3463

B. Emergency Services Phone List

1. Central Valley Medical Center, Nephi, Utah	435-623-3000
2. Delta Community Medical Center, Delta, Utah	435-864-5591
3. Medical Helicopter – Univ Utah Med Ctr, Salt Lake City, Utah	800-453-0120
4. Millard County Sheriff Department, Fillmore, Utah	435-743-5302
5. Utah Highway Patrol	435-623-1018
6. Bureau of Land Management – Richfield, Utah	435-835-2191
7. Utah OSHA (Mark LeBlanc)	801-530-6862
8. Utah Division of Oil, Gas & Mining, Salt Lake City, Utah	801-538-5340



ONE-MILE RADIUS PLAT

Proposed

**Rocky Ridge #33-1 well
Sec 33 T17S R6W
Millard County, UT**

**Python AG, LLC
717 Alvarado Ave
Davis, CA 95616
(530) 220-3463**

(not to scale)

Prepared by EXACT Engineering, Inc 5/24/2010



Directions to Delta Community Medical Center
 126 White Sage Avenue, Delta, UT 84624 - (435) 864-5591
 4.7 mi – about 12 mins



A 2250 E 3500 S, Delta, UT 84624

1. Head **west** on **E 3500 S** toward **S 2000 E**
 About 3 mins go 1.3 mi
total 1.3 mi
2. Turn **right** at **S 1000 E/Locust Ave**
 Continue to follow Locust Ave
 About 8 mins go 3.0 mi
total 4.3 mi
3. Turn **left** at **E 450 S/Birch Dr**
go 0.1 mi
total 4.4 mi
4. Take the 1st **right** onto **White Sage Ave**
 Destination will be on the left
 About 1 min go 0.3 mi
total 4.7 mi

B Delta Community Medical Center
 126 White Sage Avenue, Delta, UT 84624 - (435) 864-5591

II A. Location Layout for Workover/ Completion

1. If H₂S is previously determined during drilling operations to exist, all H₂S safety equipment will be available at the time that personnel first move onto the well site. Respiratory protection equipment as well as detection equipment will be on hand should any H₂S gas be detected during the initial rig up period.

PROPERTY OF GAS

If gas should be produced, it could be a mixture of Carbon Dioxide, Hydrogen Sulfide, and Methane.

TOXICITY OF VARIOUS GASES

<u>Common Name</u>	<u>Chemical Formula</u>	<u>Specific Gravity of Air=1</u>	<u>1 Threshold Limit</u>	<u>2 Hazardous Limit</u>	<u>3 Lethal Concern</u>
Hydrogen Cyanide	HCN	0.94	10 ppm	150 ppm/hr	300 ppm
Hydrogen Sulfide	H ₂ S	1.18	10 ppm	250 ppm/hr	600 ppm
Sulfur Dioxide	SO ₂	2.21	2 ppm	-----	1,000 ppm
Chloride	CL ₁	2.45	1 ppm	4 ppm/hr	1,000 ppm
Carbon Monoxide	CO	0.97	50 ppm	400 ppm/hr	1,000 ppm
Carbon Dioxide	CO ₂	1.52	5,000 ppm	5%	10%
Methane	CH ₄	0.55	90,000 ppm	Combustible Above 5% in Air	-----

1 Threshold=Concentration at which it is believed that all workers may repeatedly be exposed, day after day, without adverse side effects.

2 Hazardous=Concentration that may cause death.

3 Lethal=Concentration that will cause death with short-term exposure.

HYDROGEN SULFIDE

GENERAL PROPERTIES

Hydrogen Sulfide itself is a colorless and transparent gas and is flammable. It is heavier than air and, hence, may accumulate in low places.

Although the slightest presence of H₂S in the air is normally detectable by its Characteristic “Rotten Egg” odor, it is dangerous to rely on the odor as a means of detecting excessive concentrations because the sense of smell is rapidly lost allowing lethal concentrations to be accumulated without warning. The following table indicates the poisonous nature of Hydrogen Sulfide, which is more toxic than Carbon Monoxide.

COMMON NAMES: Sour Gas, Rotten Egg Gas, Sulphurated Hydrogen, Hydrogen sulfide, Stink Damp, H₂S, Acid Gas, Sweet Gas*

PHYSICAL-CHEMICAL PROPERTIES

Chemical FormulaH₂S

1. Specific Gravity (Air = 1.000)1.193 (@ 77°F)

2. Color.....None

3. OdorCompared to Rotten Eggs

4. Odor Threshold.....0.13 part of 1 ppm

5. CorrosivityReacts with metals, plastics, tissues and nerves.

6. Solubility in Water4.0 to 1 in H₂O @ 32°F
2.6 to 1 in H₂O @ 68°F

7. Effects on HumansOlfactory nerves, respiratory nerves, irritates sensitive membranes in eyes, nose, and throat.

8. Vapor Pressure.....19.6 atmospheres at 25°C

9. Explosive Limits4.3% to 46% by volume in air.

* H₂S is a sweet tasting Gas, but often the word “tasting” is left out.

10. Ignition Temperature..... 18°F (Burns with a pale blue flame)

11. Molecular Weight.....	34.08
12. Conversion Factors.....	1 mg/1 of air = 717 ppm (at 25°C and 760 mm HG). 1 ppm = 0.00139 mg/1 of air.
13. pH.....	3 in water

INDUSTRIAL OCCURRENCES

Hydrogen Sulfide exposures occur in certain processes in the petroleum industry, chemical plants, chemical laboratories, sulfur and gypsum mines, viscose rayon and rubber industries, tanneries, and in the manufacture of some chemicals, dyes, and pigments. It may be encountered in excavations in the swampy or filled ground. It is produced when sulfur-containing organic matter decomposes, and it can therefore be found in sewage or organic-waste treatment plants. A common sewer gas, it may find its way into utility manhole, particularly dangerous when encountered in tanks, vessels, and other enclosed spaces.

TOXIC PROPERTIES

Hydrogen Sulfide is an extremely toxic and irritating gas. Free Hydrogen Sulfide in the blood reduces its oxygen carrying capacity, thereby depressing the nervous system. Sufficiently high concentrations can cause blockage of the phrenic nerve, resulting in immediate collapse and death due to respiratory failure and asphyxiation.

Because Hydrogen Sulfide is oxidized quite rapidly to sulfates in the body, no permanent after effects occur in cases of recovery from acute exposures unless oxygen deprivation of the nervous system is prolonged. However, in cases of acute exposures, there is always the possibility that pulmonary edema may develop. It is also reported that symptoms such as nervousness, dry nonproductive coughing, nausea, headache, and insomnia, lasting up to about 3 days have occurred after acute exposures to Hydrogen Sulfide.

At low concentrations the predominant effect of Hydrogen Sulfide is on the eyes and respiratory tract. Eye irritation, conjunctivitis, pain, lacrimation, keratitis, and photophobia may persist for several days. Respiratory tract symptoms include coughing, painful breathing, and pain in the nose and throat.

There is no evidence that repeated exposures to Hydrogen Sulfide results in accumulative or systemic poisoning. Effects such as eye irritation, respiratory tract irritation, slow pulse rate, lassitude, digestive disturbances, and cold sweats may occur, but these symptoms disappear in a relatively short time after removal from the exposure. Repeated exposures to Hydrogen Sulfide does not appear to cause any increase or decrease in susceptibility to this gas.

The paralytic effect of Hydrogen Sulfide on the olfactory nerve is probably the most significant property of the gas. This paralysis may create a false sense of security. A worker can be overcome after the typical rotten-egg odor has disappeared. Rather than the characteristic Hydrogen Sulfide odor, some victims of sudden acute overexposure have reported a brief sickeningly sweet odor just prior to unconsciousness.

Subjective olfactory responses to various concentrations of Hydrogen Sulfide have been summarized as follows:

0.02 ppm	No odor
0.13 ppm	Minimal perceptible odor
0.77 ppm	Faint, but readily perceptible odor
4.60 ppm	Easily detectable, moderate odor
27.0 ppm	Strong, unpleasant odor, but not intolerable

Physiological responses to various concentrations of Hydrogen Sulfide have been reported as follows:

10 ppm	Beginning eye irritation
50-100 ppm	Slight conjunctivitis and respiratory tract irritation after 1 hour exposure
100 ppm	Coughing, eye irritation, loss of sense of smell after 2-15 minutes. Altered respiration, pain in the eyes, and drowsiness after 15-30 minutes, followed by throat irritation after 1 hour. Several hours ¹ exposure results in gradual increase in severity of these symptoms and death may occur within the next 48 hours.
200-300 ppm	Marked conjunctivitis and respiratory tract irritation after 1 hour exposure
500-700 ppm	Loss of consciousness and possibly death in 30 minutes.
700 ppm	Rapid unconsciousness, cessation of respiration, and death.
1000-2000 ppm	Unconsciousness at once, with early cessation of respiration and death in a few minutes. Death may occur even if individual is removed to fresh air at once.

ACCEPTABLE CONCENTRATIONS

ACCEPTABLE EIGHT-HOUR TIME-WEIGHTED AVERAGE

To avoid discomfort, the Time-Weighted average concentration of Hydrogen Sulfide Shall not exceed 10 ppm.

ACCEPTABLE CEILING CONCENTRATION

The acceptable concentration for protection of health for an eight-hour, five-day week shall be 20 ppm, Fluctuations are to occur below this concentration.

ACCEPTABLE MAXIMUM FOR PEAKS ABOVE ACCEPTABLE BASE LINE FOR CONTINUOUS EXPOSURE

A single-peak concentration not exceeding 50 ppm for a maximum of 10 minutes is allowable provided that the daily time-weighted average is not exceeded.

H₂S EQUIVALENTS

<u>Parts Per Million</u>	<u>Percents</u>	<u>Grains per 100 cu. Ft.</u>
1	.0001	.055
10	.001	.55
18	.0018	1.0
100	.01	5.5
1000	.1	55.5
10000	1.0	555.5

Grains per 100 cu. Ft. = % by volume Mole 636.4
1% by volume = 10,000 ppm

SULFUR DIOXIDE

Sulfur Dioxide (SO₂) is a colorless, transparent gas and is non-flammable.

Sulfur Dioxide is produced during the burning of H₂S. Although SO₂ is heavier than air, it will be picked up by a breeze and carried downwind at elevated temperatures, While Sulfur Dioxide is extremely irritating to the eyes and mucous membranes of the upper respiratory tract, it has exceptionally good warning powers in this respect.

CONCENTRATIONS

EFFECTS

<u>%SO₂</u>	<u>ppm</u>	
.0002	2	Safe for eight (8) hour exposure
.0005	5	Pungent odor-normally a person can detect SO ₂ in this range.
.0012	12	Throat irritation, coughing, constriction of the chest, tearing and smarting of the eyes.
.015	150	So irritating that it can only be endured for a few minutes.
.05	500	Causes a sense of suffocation, even with the first breath.

PHYSICAL PROPERTIES AND CHARACTERISTICS

Chemical Formula	SO ₂
1. Specific Gravity	2.212
2. Color.....	None
3. Flammable	No
4. Odor	Characteristic, pungent, gives ample warning of its presence.
5. Corrosivity	Dry---not corrosive to ordinary metals. Wet---corrosive to most common metals.
6. Allowable Concentrations	2 ppm (ACGIH) 2 ppm (OSHA)
7. Effects on Humans	Irritates eyes, throat and upper Respiratory system.

TOXIC PROPERTIES

Sulfur Dioxide is an irritating gas in its vapor form and the odor is so intensely irritating that concentrations of 3 to 5 parts per million in the air are readily detectable by the normal person. In higher concentrations, the severely irritating effect of the gas makes it unlikely that any person would be able to remain in a Sulfur Dioxide contaminated atmosphere unless they were unconscious or trapped.

Sulfur Dioxide gas is intensely irritating to the eyes, throat, and upper respiratory system. Inhalation of this gas in concentrations of 8 to 12 parts per million in air causes throat irritation, coughing, constriction of the chest, tearing and smarting of the eyes. 150 parts per million is so extremely irritating that it can be endured only for a few minutes. 500 parts per million is so acutely irritating to the upper respiratory tract that it causes a sense of suffocation, even with the first breath.

Out of numerous reported exposures to Sulfur Dioxide, there are few references that would indicate pneumonia as an after effect.

Well Name	PYTHON AG, LLC Rocky Ridge 33-1 43027500010000			
String	Surf	Prod		
Casing Size(in)	9.625	5.500		
Setting Depth (TVD)	1200	8000		
Previous Shoe Setting Depth (TVD)	0	1200		
Max Mud Weight (ppg)	8.6	10.4		
BOPE Proposed (psi)	500	5000		
Casing Internal Yield (psi)	3520	7740		
Operators Max Anticipated Pressure (psi)	3440	8.3		

Calculations	Surf String	9.625	"
Max BHP (psi)	.052*Setting Depth*MW=	537	
			BOPE Adequate For Drilling And Setting Casing at Depth?
MASP (Gas) (psi)	Max BHP-(0.12*Setting Depth)=	393	YES
MASP (Gas/Mud) (psi)	Max BHP-(0.22*Setting Depth)=	273	YES OK
			*Can Full Expected Pressure Be Held At Previous Shoe?
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth)=	273	NO OK
Required Casing/BOPE Test Pressure=		1200	psi
*Max Pressure Allowed @ Previous Casing Shoe=		0	psi *Assumes 1psi/ft frac gradient

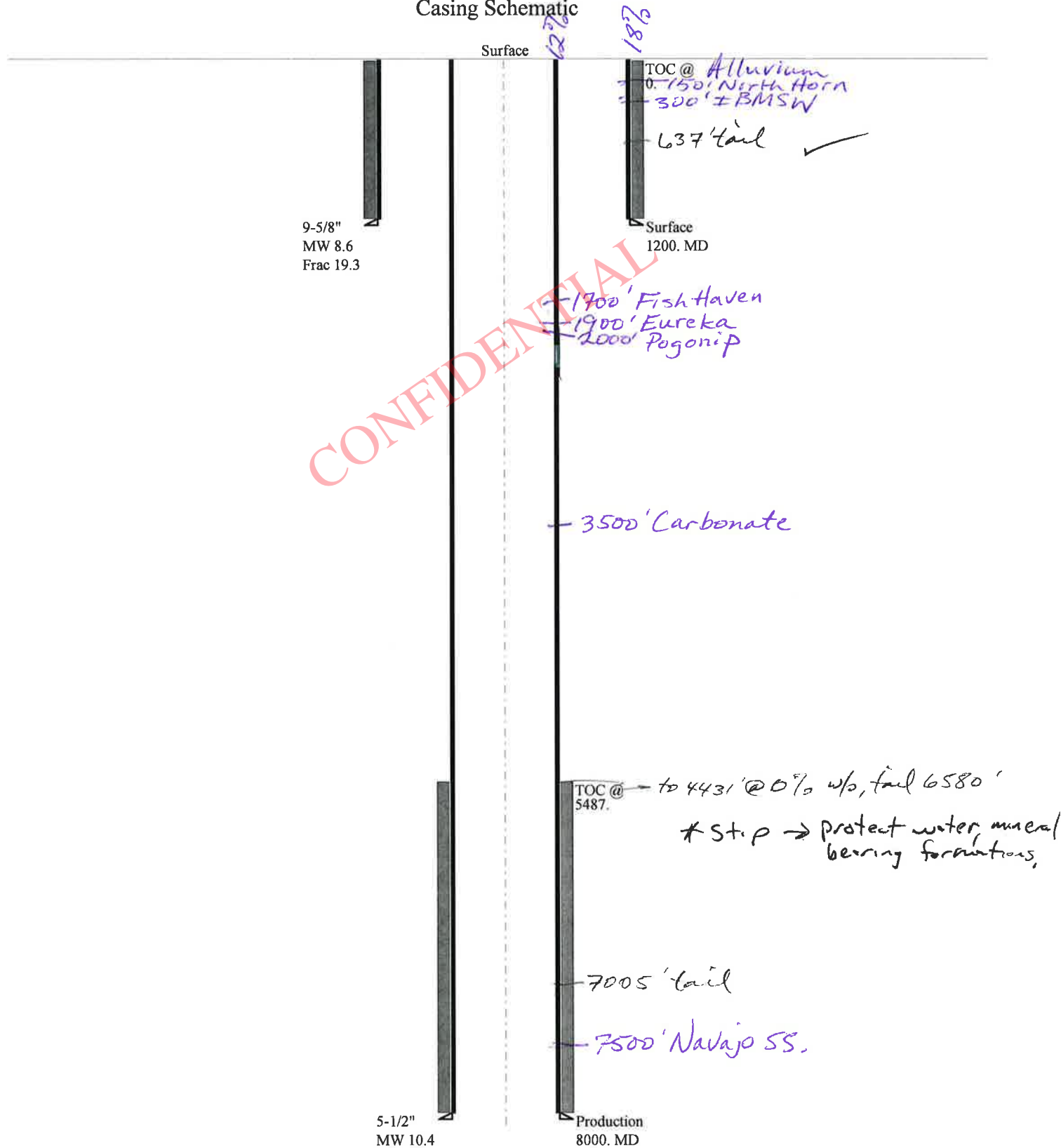
Calculations	Prod String	5.500	"
Max BHP (psi)	.052*Setting Depth*MW=	4326	
			BOPE Adequate For Drilling And Setting Casing at Depth?
MASP (Gas) (psi)	Max BHP-(0.12*Setting Depth)=	3366	YES
MASP (Gas/Mud) (psi)	Max BHP-(0.22*Setting Depth)=	2566	YES OK
			*Can Full Expected Pressure Be Held At Previous Shoe?
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth)=	2830	NO Reasonable - 1968 psi max expected
Required Casing/BOPE Test Pressure=		5000	psi
*Max Pressure Allowed @ Previous Casing Shoe=		1200	psi *Assumes 1psi/ft frac gradient

Calculations	String		"
Max BHP (psi)	.052*Setting Depth*MW=		
			BOPE Adequate For Drilling And Setting Casing at Depth?
MASP (Gas) (psi)	Max BHP-(0.12*Setting Depth)=		NO
MASP (Gas/Mud) (psi)	Max BHP-(0.22*Setting Depth)=		NO
			*Can Full Expected Pressure Be Held At Previous Shoe?
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth)=		NO
Required Casing/BOPE Test Pressure=			psi
*Max Pressure Allowed @ Previous Casing Shoe=			psi *Assumes 1psi/ft frac gradient

Calculations	String		"
Max BHP (psi)	.052*Setting Depth*MW=		
			BOPE Adequate For Drilling And Setting Casing at Depth?
MASP (Gas) (psi)	Max BHP-(0.12*Setting Depth)=		NO
MASP (Gas/Mud) (psi)	Max BHP-(0.22*Setting Depth)=		NO
			*Can Full Expected Pressure Be Held At Previous Shoe?
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth)=		NO
Required Casing/BOPE Test Pressure=			psi
*Max Pressure Allowed @ Previous Casing Shoe=			psi *Assumes 1psi/ft frac gradient

43027500010000 Rocky Ridge 33-1

Casing Schematic



Well name:	43027500010000 Rocky Ridge 33-1		
Operator:	PYTHON AG, LLC		
String type:	Surface		Project ID: 43-027-50001
Location:	MILLARD COUNTY		

Design parameters:

Collapse

Mud weight: 8.600 ppg
Design is based on evacuated pipe.

Minimum design factors:

Collapse:

Design factor 1.125

Burst:

Design factor 1.00

Environment:

H2S considered? No
Surface temperature: 74 °F
Bottom hole temperature: 91 °F
Temperature gradient: 1.40 °F/100ft
Minimum section length: 12 ft

Cement top: Surface

Burst

Max anticipated surface pressure: 1,056 psi
Internal gradient: 0.120 psi/ft
Calculated BHP 1,200 psi

No backup mud specified.

Tension:

8 Round STC: 1.80 (J)
8 Round LTC: 1.70 (J)
Buttress: 1.60 (J)
Premium: 1.50 (J)
Body yield: 1.50 (B)

Tension is based on air weight.
Neutral point: 1,047 ft

Non-directional string.

Re subsequent strings:

Next setting depth: 8,000 ft
Next mud weight: 10.400 ppg
Next setting BHP: 4,322 psi
Fracture mud wt: 19.250 ppg
Fracture depth: 1,200 ft
Injection pressure: 1,200 psi

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Est. Cost (\$)
1	1200	9.625	36.00	J-55	ST&C	1200	1200	8.796	10431
Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (kips)	Tension Strength (kips)	Tension Design Factor
1	536	2020	3.768	1200	3520	2.93	43.2	394	9.12 J

Prepared by: Helen Sadik-Macdonald
Div of Oil, Gas & Mining

Phone: 801 538-5357
FAX: 801-359-3940

Date: May 27, 2010
Salt Lake City, Utah

Remarks:

Collapse is based on a vertical depth of 1200 ft, a mud weight of 8.6 ppg. The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

Well name:	43027500010000 Rocky Ridge 33-1		
Operator:	PYTHON AG, LLC		
String type:	Production	Project ID:	43-027-50001
Location:	MILLARD COUNTY		

Design parameters:

Collapse

Mud weight: 10.400 ppg
Design is based on evacuated pipe.

Minimum design factors:

Collapse:

Design factor 1.125

Burst:

Design factor 1.00

Environment:

H2S considered? No
Surface temperature: 74 °F
Bottom hole temperature: 186 °F
Temperature gradient: 1.40 °F/100ft
Minimum section length: 100 ft

Cement top: 5,488 ft

Burst

Max anticipated surface pressure: 2,562 psi
Internal gradient: 0.220 psi/ft
Calculated BHP 4,322 psi

No backup mud specified.

Tension:

8 Round STC: 1.80 (J)
8 Round LTC: 1.80 (J)
Buttress: 1.60 (J)
Premium: 1.50 (J)
Body yield: 1.60 (B)

Non-directional string.

Tension is based on air weight.
Neutral point: 6,869 ft

Estimated cost: 47,582 (\$)

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Est. Cost (\$)
2	5500	5.5	17.00	N-80	LT&C	5500	5500	4.767	31000
1	2500	5.5	20.00	N-80	LT&C	8000	8000	4.653	16582

Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (kips)	Tension Strength (kips)	Tension Design Factor
2	2971	6039	2.032	3772	7740	2.05	143.5	348	2.43 J
1	4322	8830	2.043	4322	9190	2.13	50	428	8.56 J

Prepared by: Helen Sadik-Macdonald
Div of Oil, Gas & Mining

Phone: 801 538-5357
FAX: 801-359-3940

Date: May 6, 2010
Salt Lake City, Utah

Remarks:

Collapse is based on a vertical depth of 8000 ft, a mud weight of 10.4 ppg. The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

ON-SITE PREDRILL EVALUATION**Utah Division of Oil, Gas and Mining**

Operator	PYTHON AG, LLC						
Well Name	Rocky Ridge 33-1						
API Number	43027500010000	APD No	2526	Field/Unit	WILDCAT		
Location: 1/4,1/4	NWNW	Sec	33	Tw	17.0S	Rng	6.0W 375 FNL 1054 FWL
GPS Coord (UTM)	367654	4351076	Surface Owner	Python AG, LLC			

Participants

Ted Smith - DOGM, Darren Naylor - Exact Engineering, Inc.

Regional/Local Setting & Topography

Sevier Desert valley with a few cultivated hay fields and grazing land. This valley sits between the Canyon Mountains to the east and the Sevier River to the west. Surrounding area is dry grazing land with a few cultivated fields needing water continuously. Area of proposed pad is flat as a pancake and dry. Proposed location is approximately 3 miles SE of the town of Delta. Altitude at site approximately 4603'.

Surface Use Plan

Current Surface Use
Grazing

New Road Miles	Well Pad	Src Const Material	Surface Formation
0.03125	Width 285 Length 390	Onsite	ALLU

Ancillary Facilities N

None with exception of trailers to be on location during drilling operations.

Waste Management Plan Adequate?

Y

Environmental Parameters

Affected Floodplains and/or Wetlands N

Flora / Fauna

Flora around the drill location area consist of - Greasewood, and Winter Fat.

Fauna around the drill location area consist of - Coyote, Cattle, and Rabbit.

Soil Type and Characteristics

Alluvium valley fill with soil crusts on surface such as mosses and lichens

Erosion Issues N

Sedimentation Issues N

Site Stability Issues N

Drainage Diversion Required? N

Berm Required? N

Erosion Sedimentation Control Required? N

Paleo Survey Run? N **Paleo Potential Observed?** N **Cultural Survey Run?** N **Cultural Resources?** N

Reserve Pit

Site-Specific Factors

Site Ranking

Distance to Groundwater (feet)	100 to 200	5
Distance to Surface Water (feet)	300 to 1000	2
Dist. Nearest Municipal Well (ft)	>5280	0
Distance to Other Wells (feet)	>1320	0
Native Soil Type	Mod permeability	10
Fluid Type	Fresh Water	5
Drill Cuttings	Salt or Detrimental	10
Annual Precipitation (inches)		0
Affected Populations		
Presence Nearby Utility Conduits		

Final Score 32 3 Sensitivity Level

Characteristics / Requirements

Pit will be constructed so as not to leak, break, or discharge. The reserve pit will be lined with minimum of 12 mil plastic liner
 Pit will be 150' x 125' x 10' in size. The reserve pit will be fenced once it has been lined.
 The pit location is approximately 345 feet west of a irrigation canal running north and south.

Closed Loop Mud Required? N **Liner Required?** Y **Liner Thickness** 12 **Pit Underlayment Required?** N

Other Observations / Comments

Python AG, LLC. will use a open lined pit program. All pit fluids will be hauled to an approved disposal site for waste management once well is completed. Fresh water source will be from Delta City Access road will be using landowner constructed through landowners Python AG,LLC property for 0.03 mile to access API #4302750001. Millard county roads will be used to access the entrance to private property approximately 3.75 miles. There is a over head power line at entrance North of location along the Millard county road. There is two occupied houses 0.25 east of location and 0.5 northeast of location. Power to these houses is above ground. Agricultural irrigation ditch is located 100' east of eastern most edge of the pad. A water well is located 0.25 mile east of location. The Sevier River is approximately 5 miles west from location. There are no other oil and gas wells within one mile of proposed well. The operator Python AG, LLC owns the property the location is located on deed dated 04/09/2010. There is no local disagreement by local landowners with this drilling program. Rig lights and noise may be seen and herd in the town of Delta 3 miles NW of location. Photos are located in well file.

Ted Smith
Evaluator

4/21/2010
Date / Time

Application for Permit to Drill

Statement of Basis

6/15/2010

Utah Division of Oil, Gas and Mining

Page 1

APD No	API WellNo	Status	Well Type	Surf Owner	CBM
2526	43027500010000	LOCKED	OW	P	No
Operator	PYTHON AG, LLC		Surface Owner-APD	Python AG, LLC	
Well Name	Rocky Ridge 33-1		Unit		
Field	WILDCAT		Type of Work	DRILL	
Location	NWNW 33 17S 6W S 375 FNL 1054 FWL GPS Coord (UTM) 367647E 4351095N				

Geologic Statement of Basis

This well will likely spud into Holocene Quaternary Alluvium. Numerous underground water rights have been filed on ground water resources within a mile of the location. The water well records suggest that most wells are productive from depths of 200' to 300' TD. The Operator proposes setting 9 5/8" surface casing at 800' TD. This should suffice to protect the fresh water resource in the area. The proposed well is about 3 miles south southeast of the Delta, UT, city limits. I don't find any municipal water rights readily discernable within the search radius. This area is properly within the Basin and Range Province and likely may host valley fill below the alluvium. Little information is available on the stratigraphy in the area from the sparse nearby drilling. The Placid #1 Henley (4302730024), about 7 miles ESE and drilled in 1981, is about as detailed as is available. I talked with a public utilities commissioner about their municipal wells. They pump from between 400' and 1050'. They have one well likely within 3 miles of this location. He also said a local special water district likely has a well within 2 miles. The geologic map shows "flowing wells" close at hand but the Commissioner said they no longer flow.

Chris Kierst
APD Evaluator

4/22/2010
Date / Time

Surface Statement of Basis

A presite was conducted at 09:00 am April 21, 2010 This proposed location is 5 mile east of the Sevier River. Millard county graded roads will be used for access to the location with 0.03 miles of new access road needing to be constructed on landowners Python AG, LLC property who attended the presite. At time of presite Python AG, LLC owns the surface and has a lease # 00172361 with Lorene L. Hodgson dated February 24, 2010.

General topography in the Delta area is flat and are suitable for agricultural, irrigated hay, grazing, and wildlife habitat. This area is easily accessed off State Highway 50. Operator will be required to construct a access road 0.03 mile onto their own property. There is one irrigation canal in place approximately 100' east of the proposed pads eastern most line that runs north and south.

The proposed Rocky Ridge33-1 pad runs east west direction and is located in the Sevier Desert valley . The construction material needed for this location and access road will be obtained from on site or the local Delta gravel pit. The pad is located on flat ground.

Python AG, LLC. owns the property the location is to be built on. Python's representative Darren Naylor does not see any local opposition and says the area would like to see development.

The selected location for this well is suitable for drilling.

Ted Smith
Onsite Evaluator

4/21/2010
Date / Time

Application for Permit to Drill

Statement of Basis

6/15/2010

Utah Division of Oil, Gas and Mining

Page 2

Category	Condition
Pits	A synthetic liner with a minimum thickness of 12 mils shall be properly installed and maintained in the reserve pit.
Pits	The reserve pit should be located on the west side of the location.
Surface	The reserve pit shall be fenced upon completion of drilling operations.

CONFIDENTIAL

WORKSHEET

APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 4/14/2010

API NO. ASSIGNED: 43027500010000

WELL NAME: Rocky Ridge 33-1

OPERATOR: PYTHON AG, LLC (N3660)

PHONE NUMBER: 918 599-9400

CONTACT: Steven R. Hash

PROPOSED LOCATION: NWNW 33 170S 060W

Permit Tech Review: ☒

SURFACE: 0375 FNL 1054 FWL

Engineering Review: ☒

BOTTOM: 0375 FNL 1054 FWL

Geology Review: ☒

COUNTY: MILLARD

LATITUDE: 39.30100

LONGITUDE: -112.53492

UTM SURF EASTINGS: 367647.00

NORTHINGS: 4351095.00

FIELD NAME: WILDCAT

LEASE TYPE: 4 - Fee

LEASE NUMBER: 00172361

PROPOSED PRODUCING FORMATION(S): NAVAJO

SURFACE OWNER: 4 - Fee

COALBED METHANE: NO

RECEIVED AND/OR REVIEWED:

☒ **PLAT**

☒ **Bond:** STATE/FEE - 2501468

☐ **Potash**

☐ **Oil Shale 190-5**

☐ **Oil Shale 190-3**

☐ **Oil Shale 190-13**

☒ **Water Permit:** City of Delta

☒ **RDCC Review:** 2010-06-02 00:00:00.0

☒ **Fee Surface Agreement**

☐ **Intent to Commingle**

Commingle Approved

LOCATION AND SITING:

☐ **R649-2-3.**

Unit:

☐ **R649-3-2. General**

☒ **R649-3-3. Exception**

☒ **Drilling Unit**

Board Cause No: R649-3-3

Effective Date:

Siting:

☐ **R649-3-11. Directional Drill**

Comments: Presite Completed

Stipulations:

- 1 - Exception Location - bhill
- 5 - Statement of Basis - bhill
- 11 - Cement Productive Zones - ddoucet
- 21 - RDCC - dmason
- 23 - Spacing - dmason

CONFIDENTIAL

DIVISION OF OIL, GAS AND MINING

SPUDDING INFORMATION

Name of Company: PYTHON AG, LLC

Well Name: ROCKY RIDGE 33-1

Api No: 43-027-50001 Lease Type: STATE

Section 33 Township 17S Range 06W County MILLARD

Drilling Contractor PETE MARTIN DRLG RIG # BUCKET

SPUDDED:

Date 06/09/2010

Time _____

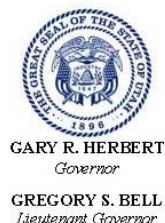
How DRY

Drilling will Commence: _____

Reported by STEVE HASH

Telephone # (918) 629-9801

Date 06/09/2010 Signed CHD



State of Utah

DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER
Executive Director

Division of Oil, Gas and Mining

JOHN R. BAZA
Division Director

Permit To Drill

Well Name: Rocky Ridge 33-1
API Well Number: 43027500010000
Lease Number: 00172361
Surface Owner: FEE (PRIVATE)
Approval Date: 6/15/2010

Issued to:

PYTHON AG, LLC, 717 Alvarado Ave, Davis, CA 95616

Authority:

Pursuant to Utah Code Ann. §40-6-1 et seq., and Utah Administrative Code R649-3-1 et seq., the Utah Division of Oil, Gas and Mining issues conditions of approval, and permit to drill the listed well. This permit is issued in accordance with the requirements of R649-3-3. The expected producing formation or pool is the NAVAJO Formation(s), completion into any other zones will require filing a Sundry Notice (Form 9). Completion and commingling of more than one pool will require approval in accordance with R649-3-22.

Duration:

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date

Exception Location:

Appropriate information has been submitted to DOGM and administrative approval of the requested exception location is hereby granted.

General:

Compliance with the requirements of Utah Admin. R. 649-1 et seq., the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

Conditions of Approval:

The Application for Permit to Drill has been forwarded to the Resource Development Coordinating Committee for review of this action. The operator will be required to comply with any applicable recommendations resulting from this review. (See attached)

This proposed well is located in an area for which drilling units (well spacing patterns) have not been established through an order of the Board of Oil, Gas and Mining (the "Board"). In order to avoid the possibility of waste or injury to correlative rights, the operator is requested, once the well has been drilled, completed, and has produced, to analyze geological and engineering data generated therefrom, as well as any similar data from surrounding areas if available. As soon as is practicable after completion of its analysis, and if the analysis suggests an area larger than the quarter-quarter section upon which the well is located is being drained, the operator is requested to seek an appropriate order from the Board establishing drilling and spacing units in conformance with such analysis by filing a Request for Agency Action with the Board.

Compliance with the Conditions of Approval/Application for Permit to Drill outlined in the Statement of Basis (copy attached).

Production casing shall be cemented 500' minimum above any water, hydrocarbon or mineral bearing formations encountered while drilling and 500' minimum above any zones tested.

Additional Approvals:

The operator is required to obtain approval from the Division of Oil, Gas and mining before performing any of the following actions during the drilling of this well:

- Any changes to the approved drilling plan – contact Dustin Doucet
- Significant plug back of the well – contact Dustin Doucet
- Plug and abandonment of the well – contact Dustin Doucet

Notification Requirements:

The operator is required to notify the Division of Oil, Gas and Mining of the following actions during drilling of this well:

- Within 24 hours following the spudding of the well – contact Carol Daniels
OR
submit an electronic sundry notice (pre-registration required) via the Utah Oil & Gas website at <https://oilgas.ogm.utah.gov>
- 24 hours prior to testing blowout prevention equipment - contact Dan Jarvis
- 24 hours prior to cementing or testing casing – contact Dan Jarvis
- Within 24 hours of making any emergency changes to the approved drilling program – contact Dustin Doucet
- 24 hours prior to commencing operations to plug and abandon the well – contact Dan Jarvis

Contact Information:

The following are Division of Oil, Gas and Mining contacts and their telephone numbers (please leave a voicemail message if the person is not available to take the call):

- Carol Daniels 801-538-5284 - office
- Dustin Doucet 801-538-5281 - office
801-733-0983 - after office hours
- Dan Jarvis 801-538-5338 - office
801-231-8956 - after office hours

Reporting Requirements:

All reports, forms and submittals as required by the Utah Oil and Gas Conservation General Rules will be promptly filed with the Division of Oil, Gas and Mining, including but not limited to:

- Entity Action Form (Form 6) – due within 5 days of spudding the well
- Monthly Status Report (Form 9) – due by 5th day of the following calendar month
- Requests to Change Plans (Form 9) – due prior to implementation
- Written Notice of Emergency Changes (Form 9) – due within 5 days
- Notice of Operations Suspension or Resumption (Form 9) – due prior to implementation
- Report of Water Encountered (Form 7) – due within 30 days after completion
- Well Completion Report (Form 8) – due within 30 days after completion or plugging

Approved By:

Approved By:

A handwritten signature in black ink, appearing to read "B. D. Gifford", written in a cursive style.

Acting Associate Director, Oil & Gas

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		FORM 9
SUNDRY NOTICES AND REPORTS ON WELLS Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		5. LEASE DESIGNATION AND SERIAL NUMBER: 00172361
1. TYPE OF WELL Oil Well		6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
2. NAME OF OPERATOR: PYTHON AG, LLC		7. UNIT or CA AGREEMENT NAME:
3. ADDRESS OF OPERATOR: 717 Alvarado Ave , Davis, CA, 95616		8. WELL NAME and NUMBER: Rocky Ridge 33-1
PHONE NUMBER: 530 220-3463 Ext		9. API NUMBER: 43027500010000
4. LOCATION OF WELL FOOTAGES AT SURFACE: 0375 FNL 1054 FWL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NWNW Section: 33 Township: 17.0S Range: 06.0W Meridian: S		9. FIELD and POOL or WILDCAT: WILDCAT
COUNTY: MILLARD		STATE: UTAH
11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA		
TYPE OF SUBMISSION	TYPE OF ACTION	
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:	<input type="checkbox"/> ACIDIZE	
<input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion:	<input type="checkbox"/> ALTER CASING	
<input checked="" type="checkbox"/> SPUD REPORT Date of Spud: 6/9/2010	<input type="checkbox"/> CASING REPAIR	
<input type="checkbox"/> DRILLING REPORT Report Date:	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	
	<input type="checkbox"/> CHANGE TUBING	
	<input type="checkbox"/> CHANGE WELL STATUS	
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	
	<input type="checkbox"/> DEEPEN	
	<input type="checkbox"/> FRACTURE TREAT	
	<input type="checkbox"/> OPERATOR CHANGE	
	<input type="checkbox"/> PLUG AND ABANDON	
	<input type="checkbox"/> PRODUCTION START OR RESUME	
	<input type="checkbox"/> RECLAMATION OF WELL SITE	
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	
	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	
	<input type="checkbox"/> TUBING REPAIR	
	<input type="checkbox"/> VENT OR FLARE	
	<input type="checkbox"/> WATER SHUTOFF	
	<input type="checkbox"/> SI TA STATUS EXTENSION	
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	
	<input type="checkbox"/> OTHER	
	OTHER:	
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc. Document spud report phoned to UDOGM SLC office on 6/9/2010 SPUD well with Pete Martin Rathole Drilling on 6/9/2010 set 36" casing at 38ft BGL; Accepted by the drilled 26" hole w/ mud to 120'; set 20" casing at 120ft and cmt'd with 18 c Utah Division of yds of 10sx groute. Wait on drilling rig Oil, Gas and Mining <div style="text-align: right; font-weight: bold; font-size: 1.2em;"> FOR RECORD ONLY June 28, 2010 </div>		
NAME (PLEASE PRINT) Steven R. Hash	PHONE NUMBER 918 599-9400	TITLE Consulting Engineer (Agent)
SIGNATURE N/A	DATE 6/27/2010	

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		FORM 9
SUNDRY NOTICES AND REPORTS ON WELLS Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		5. LEASE DESIGNATION AND SERIAL NUMBER: 00172361
1. TYPE OF WELL Oil Well		6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
2. NAME OF OPERATOR: PYTHON AG, LLC		7. UNIT or CA AGREEMENT NAME:
3. ADDRESS OF OPERATOR: 717 Alvarado Ave , Davis, CA, 95616		8. WELL NAME and NUMBER: Rocky Ridge 33-1
PHONE NUMBER: 530 220-3463 Ext		9. API NUMBER: 43027500010000
4. LOCATION OF WELL FOOTAGES AT SURFACE: 0375 FNL 1054 FWL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NWNW Section: 33 Township: 17.0S Range: 06.0W Meridian: S		9. FIELD and POOL or WILDCAT: WILDCAT
COUNTY: MILLARD		STATE: UTAH
11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA		
TYPE OF SUBMISSION	TYPE OF ACTION	
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:	<input type="checkbox"/> ACIDIZE	
<input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion:	<input type="checkbox"/> ALTER CASING	
<input type="checkbox"/> SPUD REPORT Date of Spud:	<input type="checkbox"/> CASING REPAIR	
<input checked="" type="checkbox"/> DRILLING REPORT Report Date: 6/27/2010	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	
	<input type="checkbox"/> CHANGE TUBING	
	<input type="checkbox"/> CHANGE WELL STATUS	
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	
	<input type="checkbox"/> DEEPEN	
	<input type="checkbox"/> FRACTURE TREAT	
	<input type="checkbox"/> OPERATOR CHANGE	
	<input type="checkbox"/> PLUG AND ABANDON	
	<input type="checkbox"/> PRODUCTION START OR RESUME	
	<input type="checkbox"/> RECLAMATION OF WELL SITE	
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	
	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	
	<input type="checkbox"/> TUBING REPAIR	
	<input type="checkbox"/> VENT OR FLARE	
	<input type="checkbox"/> WATER SHUTOFF	
	<input type="checkbox"/> SI TA STATUS EXTENSION	
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	
	<input type="checkbox"/> OTHER	
	OTHER:	
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc. 2010.06.18 638'; start drlg 12-1/4" hole with Patterson #77; 137' to 638'; MW 9.0 vis 50 2010.06.19 1270'; TD 12-1/4" hole, MW 9.6 vis 60 2010.06.20 1270'; run 9-5/8" 36ppf J55 STC new csg, set at 1270 2010.06.21 1270'; 5M BOPE & test 2010.06.22 1408'; drlg MW 8.4 vis 43 2010.06.23 2863'; drlg MW 9.0 vis 45 2010.06.24 3552'; drlg MW 8.9 vis 46 2010.06.25 3921'; drlg MW 9.0 vis 45 2010.06.26 4607'; drlg MW 9.5 vis 47 2010.06.27 4980'; drlg MW 10.2 vis 44		
<div style="text-align: right;"> Accepted by the Utah Division of Oil, Gas and Mining FOR RECORD ONLY June 28, 2010 </div>		
NAME (PLEASE PRINT) Steven R. Hash		PHONE NUMBER 918 599-9400
SIGNATURE N/A		TITLE Consulting Engineer (Agent)
DATE 6/28/2010		

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

FORM 6

ENTITY ACTION FORM

Operator: Python AG, LLC Operator Account Number: N 3660
Address: 717 Alvarado Ave
city Davis
state CA zip 95616 Phone Number: (530) 220-3463

Well 1

API Number	Well Name		QQ	Sec	Twp	Rng	County
4302750001	Rocky Ridge 33-1		NWNW	33	17S	06W	Millard
Action Code	Current Entity Number	New Entity Number	Spud Date			Entity Assignment Effective Date	
A	99999	17711	6/9/2010			7/27/10	
Comments: drilling started 6/18/2010 NAVA							

CONFIDENTIAL

Well 2

API Number	Well Name		QQ	Sec	Twp	Rng	County
Action Code	Current Entity Number	New Entity Number	Spud Date			Entity Assignment Effective Date	
Comments:							

Well 3

API Number	Well Name		QQ	Sec	Twp	Rng	County
Action Code	Current Entity Number	New Entity Number	Spud Date			Entity Assignment Effective Date	
Comments:							

ACTION CODES:

- A - Establish new entity for new well (single well only)
- B - Add new well to existing entity (group or unit well)
- C - Re-assign well from one existing entity to another existing entity
- D - Re-assign well from one existing entity to a new entity
- E - Other (Explain in 'comments' section)

Steven R Hash - EXACT Engineering, Inc

Name (Please Print)

Steven R. Hash

Signature

Consulting Engineer

Title

6/27/2010

Date

RECEIVED

JUN 28 2010

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		FORM 9
SUNDRY NOTICES AND REPORTS ON WELLS Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		5. LEASE DESIGNATION AND SERIAL NUMBER: 00172361
1. TYPE OF WELL Oil Well		6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
2. NAME OF OPERATOR: PYTHON AG, LLC		7. UNIT or CA AGREEMENT NAME:
3. ADDRESS OF OPERATOR: 717 Alvarado Ave , Davis, CA, 95616		8. WELL NAME and NUMBER: Rocky Ridge 33-1
PHONE NUMBER: 530 220-3463 Ext		9. API NUMBER: 43027500010000
4. LOCATION OF WELL FOOTAGES AT SURFACE: 0375 FNL 1054 FWL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NWNW Section: 33 Township: 17.0S Range: 06.0W Meridian: S		9. FIELD and POOL or WILDCAT: WILDCAT
COUNTY: MILLARD		STATE: UTAH
11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA		
TYPE OF SUBMISSION	TYPE OF ACTION	
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:	<input type="checkbox"/> ACIDIZE	
<input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion:	<input type="checkbox"/> ALTER CASING	
<input type="checkbox"/> SPUD REPORT Date of Spud:	<input type="checkbox"/> CASING REPAIR	
<input checked="" type="checkbox"/> DRILLING REPORT Report Date: 7/10/2010	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	
	<input type="checkbox"/> CHANGE TUBING	
	<input type="checkbox"/> CHANGE WELL STATUS	
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	
	<input type="checkbox"/> DEEPEN	
	<input type="checkbox"/> FRACTURE TREAT	
	<input type="checkbox"/> OPERATOR CHANGE	
	<input type="checkbox"/> PLUG AND ABANDON	
	<input type="checkbox"/> PRODUCTION START OR RESUME	
	<input type="checkbox"/> RECLAMATION OF WELL SITE	
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	
	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	
	<input type="checkbox"/> TUBING REPAIR	
	<input type="checkbox"/> VENT OR FLARE	
	<input type="checkbox"/> WATER SHUTOFF	
	<input type="checkbox"/> SI TA STATUS EXTENSION	
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	
	<input type="checkbox"/> OTHER	
	OTHER:	
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc. 2010.06.28 drlg 5064, MW 10.1, vis 67 --- 2010.06.29 drlg 5431, MW 10.2, vis 50 --- 2010.06.30 drlg 5502, MW 10.3, vis 50 --- 2010.07.01 drlg 5584, MW 10.4, vis 48 --- 2010.07.02 drlg 5853, MW 10.4, vis 45 --- 2010.07.03 drlg 5960, MW 10.3, vis 45 --- 2010.07.04 drlg 6200, MW 10.2, vis 45 --- 2010.07.05 drlg 6470, MW 10.3, vis 43 --- 2010.07.06 drlg 6560, MW 10.4, vis 44 --- 2010.07.07 drlg 6791, MW 10.4, vis 44 --- 2010.07.08 drlg 6858, MW 10.4, vis 44 --- 2010.07.09 drlg 7058, MW 10.4, vis 42 --- 2010.07.10 trip 7137, MW 10.4, vis 39		
<div style="text-align: right;"> Accepted by the Utah Division of Oil, Gas and Mining FOR RECORD ONLY July 15, 2010 </div>		
NAME (PLEASE PRINT) Steven R. Hash		PHONE NUMBER 918 599-9400
SIGNATURE N/A		TITLE Consulting Engineer (Agent)
DATE 7/11/2010		

<div>STATE OF UTAH</div> <div>DEPARTMENT OF NATURAL RESOURCES</div> <div>DIVISION OF OIL, GAS, AND MINING</div>		<div>FORM 9</div> <div>5.LEASE DESIGNATION AND SERIAL NUMBER: 00172361</div>	
<div>SUNDRY NOTICES AND REPORTS ON WELLS</div> <div>Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.</div>		<div>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</div> <div>7.UNIT or CA AGREEMENT NAME:</div>	
<div>1. TYPE OF WELL</div> <div>Oil Well</div>		<div>8. WELL NAME and NUMBER:</div> <div>Rocky Ridge 33-1</div>	
<div>2. NAME OF OPERATOR:</div> <div>PYTHON AG, LLC</div>		<div>9. API NUMBER:</div> <div>43027500010000</div>	
<div>3. ADDRESS OF OPERATOR:</div> <div>717 Alvarado Ave , Davis, CA, 95616</div>		<div>PHONE NUMBER:</div> <div>530 220-3463 Ext</div>	
<div>4. LOCATION OF WELL</div> <div>FOOTAGES AT SURFACE:</div> <div>0375 FNL 1054 FWL</div> <div>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</div> <div>Qtr/Qtr: NWNW Section: 33 Township: 17.0S Range: 06.0W Meridian: S</div>		<div>9. FIELD and POOL or WILDCAT:</div> <div>WILDCAT</div> <div>COUNTY:</div> <div>MILLARD</div> <div>STATE:</div> <div>UTAH</div>	
<div>11.</div> <div>CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA</div>			
<div>TYPE OF SUBMISSION</div> <div> <input type="checkbox"/> NOTICE OF INTENT Approximate date work will start: </div> <div> <input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion: </div> <div> <input type="checkbox"/> SPUD REPORT Date of Spud: </div> <div> <input checked="" type="checkbox"/> DRILLING REPORT Report Date: 7/20/2010 </div>		<div>TYPE OF ACTION</div> <div> <input type="checkbox"/> ACIDIZE <input type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> DEEPEN <input type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PRODUCTION START OR RESUME <input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> WILDCAT WELL DETERMINATION </div> <div> <input type="checkbox"/> ALTER CASING <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> SI TA STATUS EXTENSION <input type="checkbox"/> OTHER </div> <div> <input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CONVERT WELL TYPE <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> PLUG BACK <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION <input type="checkbox"/> TEMPORARY ABANDON <input type="checkbox"/> WATER DISPOSAL <input type="checkbox"/> APD EXTENSION OTHER: </div>	
<div>12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.</div> <div> 2010.07.11 drlg 7321, MW 10.4, vis 41 --- 2010.07.12 drlg 7496, MW 10.4, vis 43 --- 2010.07.13 reaming 7522, MW 10.4, vis 43 --- 2010.07.14 drlg 7686, MW 10.4, vis 43 --- 2010.07.15 drlg 7818, MW 10.5, vis 43 --- 2010.07.16 circ at TD 7943, MW 10.4, vis 45 --- 2010.07.17 elog, wait on DST --- 2010.07.18 wait on DST --- 2010.07.19 DST #1 --- 2010.07.20 DST #2 </div>			
<div>NAME (PLEASE PRINT)</div> <div>Steven R. Hash</div>		<div>PHONE NUMBER</div> <div>918 599-9400</div>	
<div>SIGNATURE</div> <div>N/A</div>		<div>TITLE</div> <div>Consulting Engineer (Agent)</div> <div>DATE</div> <div>7/21/2010</div>	

Accepted by the

Utah Division of

Oil, Gas and Mining

FOR RECORD ONLY

July 26, 2010

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		FORM 9
SUNDRY NOTICES AND REPORTS ON WELLS Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		5. LEASE DESIGNATION AND SERIAL NUMBER: 00172361
1. TYPE OF WELL Oil Well		6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
2. NAME OF OPERATOR: PYTHON AG, LLC		7. UNIT or CA AGREEMENT NAME:
3. ADDRESS OF OPERATOR: 717 Alvarado Ave , Davis, CA, 95616		8. WELL NAME and NUMBER: Rocky Ridge 33-1
PHONE NUMBER: 530 220-3463 Ext		9. API NUMBER: 43027500010000
4. LOCATION OF WELL FOOTAGES AT SURFACE: 0375 FNL 1054 FWL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NWNW Section: 33 Township: 17.0S Range: 06.0W Meridian: S		9. FIELD and POOL or WILDCAT: WILDCAT
		COUNTY: MILLARD
		STATE: UTAH

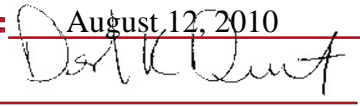
11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> NOTICE OF INTENT Approximate date work will start: 7/28/2010 <input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion: <input type="checkbox"/> SPUD REPORT Date of Spud: <input type="checkbox"/> DRILLING REPORT Report Date:	<input type="checkbox"/> ACIDIZE <input type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE WELL STATUS <input checked="" type="checkbox"/> DEEPEN <input type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PRODUCTION START OR RESUME <input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> ALTER CASING <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> SI TA STATUS EXTENSION <input type="checkbox"/> OTHER	<input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CONVERT WELL TYPE <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> PLUG BACK <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION <input type="checkbox"/> TEMPORARY ABANDON <input type="checkbox"/> WATER DISPOSAL <input type="checkbox"/> APD EXTENSION OTHER: <input style="width: 100px;" type="text"/>

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.
 Well drilled to total depth of 8000' and logged, permission to exceed APD depth of 8000' and drill 100 ft of rathole to 8100' max depth is requested by this notice of intent.

Approved by the
Utah Division of
Oil, Gas and Mining

Date: August 12, 2010

By: 

NAME (PLEASE PRINT) Steven R. Hash	PHONE NUMBER 918 599-9400	TITLE Consulting Engineer (Agent)
SIGNATURE N/A		DATE 7/28/2010

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		FORM 9
SUNDRY NOTICES AND REPORTS ON WELLS Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		5. LEASE DESIGNATION AND SERIAL NUMBER: 00172361
1. TYPE OF WELL Oil Well		6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
2. NAME OF OPERATOR: PYTHON AG, LLC		7. UNIT or CA AGREEMENT NAME:
3. ADDRESS OF OPERATOR: 717 Alvarado Ave , Davis, CA, 95616		8. WELL NAME and NUMBER: Rocky Ridge 33-1
4. LOCATION OF WELL FOOTAGES AT SURFACE: 0375 FNL 1054 FWL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NWNW Section: 33 Township: 17.0S Range: 06.0W Meridian: S		9. API NUMBER: 43027500010000
PHONE NUMBER: 530 220-3463 Ext		9. FIELD and POOL or WILDCAT: WILDCAT
11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA		COUNTY: MILLARD
STATE: UTAH		
TYPE OF SUBMISSION	TYPE OF ACTION	
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:	<input type="checkbox"/> ACIDIZE	
<input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion:	<input type="checkbox"/> ALTER CASING	
<input type="checkbox"/> SPUD REPORT Date of Spud:	<input type="checkbox"/> CASING REPAIR	
<input checked="" type="checkbox"/> DRILLING REPORT Report Date: 8/1/2010	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	
	<input type="checkbox"/> CHANGE TUBING	
	<input type="checkbox"/> CHANGE WELL STATUS	
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	
	<input type="checkbox"/> DEEPEN	
	<input type="checkbox"/> FRACTURE TREAT	
	<input type="checkbox"/> OPERATOR CHANGE	
	<input type="checkbox"/> PLUG AND ABANDON	
	<input type="checkbox"/> PRODUCTION START OR RESUME	
	<input type="checkbox"/> RECLAMATION OF WELL SITE	
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	
	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	
	<input type="checkbox"/> TUBING REPAIR	
	<input type="checkbox"/> VENT OR FLARE	
	<input type="checkbox"/> WATER SHUTOFF	
	<input type="checkbox"/> SI TA STATUS EXTENSION	
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	
	<input type="checkbox"/> OTHER: <input style="width: 100px;" type="text"/>	
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc. 2010.07.21 wait on csg --- 2010.07.22 wait on csg --- 2010.07.23 wait on csg --- 2010.07.24 wait on csg --- 2010.07.25 wait on csg --- 2010.07.26 wait on csg --- 2010.07.27 drlg rathole 7943 to 8019 --- 2010.07.28 drlg rathole 8018 to 8100 --- 2010.07.29 run & cmt csg --- 2010.07.30 rig released; final drlg report - waiting on completion		
Accepted by the Utah Division of Oil, Gas and Mining FOR RECORD ONLY August 16, 2010		
NAME (PLEASE PRINT) Steven R. Hash		PHONE NUMBER 918 599-9400
SIGNATURE N/A		TITLE Consulting Engineer (Agent)
		DATE 8/12/2010

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		FORM 9
SUNDRY NOTICES AND REPORTS ON WELLS Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		5. LEASE DESIGNATION AND SERIAL NUMBER: 00172361
1. TYPE OF WELL Oil Well		6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
2. NAME OF OPERATOR: PYTHON AG, LLC		7. UNIT or CA AGREEMENT NAME:
3. ADDRESS OF OPERATOR: 717 Alvarado Ave, Davis, CA, 95616		8. WELL NAME and NUMBER: Rocky Ridge 33-1
PHONE NUMBER: 530 220-3463 Ext		9. API NUMBER: 43027500010000
4. LOCATION OF WELL FOOTAGES AT SURFACE: 0375 FNL 1054 FWL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NWNW Section: 33 Township: 17.0S Range: 06.0W Meridian: S		9. FIELD and POOL or WILDCAT: WILDCAT
		COUNTY: MILLARD
		STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> NOTICE OF INTENT Approximate date work will start: 12/11/2010 <input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion: <input type="checkbox"/> SPUD REPORT Date of Spud: <input type="checkbox"/> DRILLING REPORT Report Date:	<input type="checkbox"/> ACIDIZE <input type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> DEEPEN <input type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PRODUCTION START OR RESUME <input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> ALTER CASING <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> FRACTURE TREAT <input checked="" type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> SI TA STATUS EXTENSION <input type="checkbox"/> OTHER	<input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CONVERT WELL TYPE <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> PLUG BACK <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION <input type="checkbox"/> TEMPORARY ABANDON <input type="checkbox"/> WATER DISPOSAL <input type="checkbox"/> APD EXTENSION OTHER: <input style="width: 100px;" type="text"/>

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

New exploratory well tested 2 zones dry - RIG ON HOLE - ready to P&A
 12/11/2010; TD 8100'; 9-5/8" surf csg @ 1270'; 5-1/2" 17# @ 8100'; PBDT
 8019; TOC @ 3650' by CBL; zone #1 perfs 7905-7985; CIBP 7850' 50' cmt;
 zone #2 perfs 7350-7380; Formation tops: South Flat 1710'; Flagstaff 3595';
 No Horn 3755'; Arapien 3875'; Paleozoic 4828'; Final P&A proposal as follows:
 wireline bail cmt 7800-7750; set CIBP 7300'; move in pump equip, spot cmt
 7300-7200; spot cmt 3700-3500; perf 6 holes @ 1370', est circ down 5-1/2"
 and out 9-5/8" x 5-1/2"; pump 475 sx cmt around leaving csg & annulus full
 of cmt from 1370' to surface. Cut off casings 4 ft BGL and weld on plate with
 API# & date. Well P&A. Plug R&M holes.

Approved by the
Utah Division of
Oil, Gas and Mining

Date: 12/09/2010

By:

NAME (PLEASE PRINT) Steven R. Hash	PHONE NUMBER 918 599-9400	TITLE Consulting Engineer (Agent)
SIGNATURE N/A	DATE 12/9/2010	



The Utah Division of Oil, Gas, and Mining

- State of Utah
- Department of Natural Resources

Electronic Permitting System - Sundry Notices

Sundry Conditions of Approval Well Number 43027500010000

- 1. Notify the Division at least 24 hours prior to conducting abandonment operations. Please call Dan Jarvis at 801-538-5338.**
- 2. Move Plug #3: This plug shall be moved downhole 200' to isolate the Paleozoic and Arapien formations from the North Horn/Flagstaff formations. The plug shall be balanced from 3900' to 3700'.**
- 3. Surface reclamation shall be done in accordance with R649-3-34 – Well Site Restoration.**
- 4. All balanced plugs shall be tagged to ensure that they are at the depth specified.**
- 5. All annuli shall be cemented from a minimum depth of 100' to the surface.**
- 6. All requirements in the Oil and Gas Conservation General Rule R649-3-24 shall apply.**
- 7. If there are any changes to the procedure or the wellbore configuration, notify Dustin Doucet at 801-538-5281 (ofc) or 801-733-0983 (home) prior to continuing with the procedure.**
- 8. All other requirements for notice and reporting in the Oil and Gas Conservation General Rules shall apply.**

**Approved by the
Utah Division of
Oil, Gas and Mining**

Date: 12/09/2010
By: Dustin Doucet

API Well No: 43-027-50001-00-00

Permit No:

Well Name/No: Rocky Ridge 33-1

Company Name: PYTHON AG, LLC

Location: Sec: 33 T: 17S R: 6W Spot: NWNW

Coordinates: X: 367647 Y: 4351095

Field Name: WILDCAT

County Name: MILLARD

String Information

String	Bottom (ft sub)	Diameter (inches)	Weight (lb/ft)	Length (ft)	Capacity (f/cf)
HOL1	1270	12.25			
SURF	1270	9.625	36		
HOL2	8100	8.75			
PROD	8100	5.5	17		7.661

$$8\frac{3}{4}" \times 5\frac{1}{2}" (108) \rightarrow 2.9387$$

$$9\frac{5}{8}" \times 5\frac{1}{2}" \rightarrow 3.716$$

Surface: 9.625 in. @ 1270 ft.

Hole: 12.25 in. @ 1270 ft.

Plug #4

$$100' / (1.15) (2.9387) = 39.5x$$

$$9\frac{5}{8}" 1270' / (1.15) (3.716) = 29.75x$$

$$1370' / (1.15) (7.661) = 155.5x$$

491.5x total

propose 475.5x

OK

Cement Information

String	BOC (ft sub)	TOC (ft sub)	Class	Sacks
PROD	8100	3650		

Perforation Information

Top (ft sub)	Bottom (ft sub)	Shts/Ft	No Shts	Dt Squeeze
7905	7985			
7350	7380			

Approved by the
Utah Division of
Oil, Gas and Mining

Date: 12/09/2010

By: Dark K. Duff

Formation Information

Formation	Depth
FLAG	3595
NHORN	3755
ARAS	3875
PALEO	4828

Plug #2

$$100' / (1.15) (7.665) = 12.5x \text{ reqd.}$$

Plug #1

$$50' / (1.15) (7.661) = 6 \text{ additional } 5x$$

Cement from 8100 ft. to 3650 ft.

Production: 5.5 in. @ 8100 ft.

CIBPE 7850' w/ 50' on top

7905

Hole: 8.75 in. @ 8100 ft.

7985

TD:

TVD:

PBD:

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		FORM 9
SUNDRY NOTICES AND REPORTS ON WELLS Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		5. LEASE DESIGNATION AND SERIAL NUMBER: 00172361
1. TYPE OF WELL Oil Well		6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
2. NAME OF OPERATOR: PYTHON AG, LLC		7. UNIT or CA AGREEMENT NAME:
3. ADDRESS OF OPERATOR: 717 Alvarado Ave , Davis, CA, 95616		8. WELL NAME and NUMBER: ROCKY RIDGE 33-1
4. LOCATION OF WELL FOOTAGES AT SURFACE: 0375 FNL 1054 FWL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NWNW Section: 33 Township: 17.0S Range: 06.0W Meridian: S		9. API NUMBER: 43027500010000
9. FIELD and POOL or WILDCAT: WILDCAT		COUNTY: MILLARD
STATE: UTAH		
11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA		
TYPE OF SUBMISSION	TYPE OF ACTION	
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:	<input type="checkbox"/> ACIDIZE <input type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> DEEPEN <input type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PRODUCTION START OR RESUME <input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> WILDCAT WELL DETERMINATION	
<input checked="" type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion: 12/19/2010	<input type="checkbox"/> ALTER CASING <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> FRACTURE TREAT <input checked="" type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> SI TA STATUS EXTENSION <input type="checkbox"/> OTHER	
<input type="checkbox"/> SPUD REPORT Date of Spud:	<input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CONVERT WELL TYPE <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> PLUG BACK <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION <input type="checkbox"/> TEMPORARY ABANDON <input type="checkbox"/> WATER DISPOSAL <input type="checkbox"/> APD EXTENSION	
<input type="checkbox"/> DRILLING REPORT Report Date:	OTHER: <input style="width: 100px;" type="text"/>	
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc. Sundry Notice of Intent to PxA approved by UDOGM 12/9/2010; on 12/3/2010 set CIBP @ 7850; on 12/17/2010 bail 100' cmt for PBTD 7750; set CIBP 7300; on 12/18/2010 pump 25 sx cmt 7300-7200 via tbq; pump 25 sx 3900-3700 tag; perf 6 holes @ 1370'; displace csg & annulus w/ freshwater; halt abandonment; SWI pending final PxA		
NAME (PLEASE PRINT) Steven R. Hash		PHONE NUMBER 918 599-9400
SIGNATURE N/A		TITLE Consulting Engineer (Agent)
DATE 8/8/2011		

Accepted by the
Utah Division of
Oil, Gas and Mining
FOR RECORD ONLY

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

AMENDED REPORT ☐ FORM 8
(highlight changes)

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

1a. TYPE OF WELL: OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> DRY <input checked="" type="checkbox"/> OTHER _____		5. LEASE DESIGNATION AND SERIAL NUMBER: 00172361
b. TYPE OF WORK: NEW WELL <input checked="" type="checkbox"/> HORIZ. LATS. <input type="checkbox"/> DEEP-EN <input type="checkbox"/> RE-ENTRY <input type="checkbox"/> DIFF. RESVR. <input type="checkbox"/> OTHER _____		6. IF INDIAN, ALLOTTEE OR TRIBE NAME
2. NAME OF OPERATOR: PYTHON AG, LLC		7. UNIT or CA AGREEMENT NAME
3. ADDRESS OF OPERATOR: 717 ALVARADO^{TY} DAVIS STATE CA ZIP 95616		8. WELL NAME and NUMBER: ROCKY RIDGE 33-1
PHONE NUMBER: 530-220-3463		9. API NUMBER: 4302750001
4. LOCATION OF WELL (FOOTAGES) AT SURFACE: 0375 FNL 1054 FNL AT TOP PRODUCING INTERVAL REPORTED BELOW: AT TOTAL DEPTH: 0412 FNL 1029 FNL		10 FIELD AND POOL, OR WILDCAT WILDCAT
		11. QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: NW NW 33 17S 06W S
		12. COUNTY MILLARD
		13. STATE UTAH

14. DATE SPUDDED: 6/18/2010	15. DATE T.D. REACHED: 7/16/2010	16. DATE COMPLETED NA	ABANDONED <input checked="" type="checkbox"/> READY TO PRODUCE <input type="checkbox"/>	17. ELEVATIONS (DF, RKB, RT, GL): KB 4621
18. TOTAL DEPTH: MD 8100 TVD 8098	19. PLUG BACK T.D.: MD 8019 TVD 8017	20. IF MULTIPLE COMPLETIONS, HOW MANY? -		21. DEPTH BRIDGE MD - PLUG SET: TVD -
22. TYPE ELECTRIC AND OTHER MECHANICAL LOGS RUN (Submit copy of each) Compensated density/neutron; dual laterolog; GR-LAL			23. WAS WELL CORED? NO <input checked="" type="checkbox"/> YES <input type="checkbox"/> (Submit analysis) WAS DST RUN? NO <input type="checkbox"/> YES <input checked="" type="checkbox"/> (Submit report) DIRECTIONAL SURVEY? NO <input type="checkbox"/> YES <input checked="" type="checkbox"/> (Submit copy)	

24. CASING AND LINER RECORD (Report all strings set in well)

HOLE SIZE	SIZE/GRADE	WEIGHT (#/ft.)	TOP (MD)	BOTTOM (MD)	STAGE CEMENTER DEPTH	CEMENT TYPE & NO. OF SACKS	SLURRY VOLUME (BBL)	CEMENT TOP **	AMOUNT PULLED
36	36 -	-	0	38	-	0	0	0	0
36	20 -	-	0	120	-	1864	86	0	0
12 1/4	9 5/8 J55	36	0	1270	-	PRM 865	177	0	0
8 3/4	5 1/2 N80	17/20	0	8100	4886	50:50 1010	216	4900	0
						LITE 910	345	3650	0

25. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
2 7/8	1303	None						

26. PRODUCING INTERVALS

FORMATION NAME	TOP (MD)	BOTTOM (MD)	TOP (TVD)	BOTTOM (TVD)	INTERVAL (Top/Bot - MD)	SIZE	NO. HOLES	PERFORATION STATUS
(A) SOUTH FLAT	1710				7905-7985	.43	80	Open <input type="checkbox"/> Squeezed <input checked="" type="checkbox"/> CIBP
(B) NORTH HORN	3756				7350-7380	.43	60	Open <input type="checkbox"/> Squeezed <input checked="" type="checkbox"/> CIBP
(C) ARAPIEN	3876	4830						Open <input type="checkbox"/> Squeezed <input type="checkbox"/>
(D) PRM 201C	4830	8100						Open <input type="checkbox"/> Squeezed <input type="checkbox"/>

28. ACID, FRACTURE, TREATMENT, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL	AMOUNT AND TYPE OF MATERIAL
7905-7985	8000g 15% HCL
7350-7380	4000g 15% HCL

29. ENCLOSED ATTACHMENTS:

- | | | | |
|----------------------------------------------------------------------------------------|-----------------------------------------------------|------------------------------------------------|--------------------------------------------------------|
| <input checked="" type="checkbox"/> ELECTRICAL/MECHANICAL LOGS | <input checked="" type="checkbox"/> GEOLOGIC REPORT | <input checked="" type="checkbox"/> DST REPORT | <input checked="" type="checkbox"/> DIRECTIONAL SURVEY |
| <input checked="" type="checkbox"/> SUNDRY NOTICE FOR PLUGGING AND CEMENT VERIFICATION | <input type="checkbox"/> CORE ANALYSIS | <input type="checkbox"/> OTHER: _____ | |

30. WELL STATUS:

SHUT-IN

31. INITIAL PRODUCTION

INTERVAL A (As shown in Item #26)

DATE FIRST PRODUCED:	TEST DATE:	HOURS TESTED:	TEST PRODUCTION RATES: →	OIL - BBL:	GAS - MCF:	WATER - BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU - GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	INTERVAL STATUS:

INTERVAL B (As shown in Item #26)

DATE FIRST PRODUCED:	TEST DATE:	HOURS TESTED:	TEST PRODUCTION RATES: →	OIL - BBL:	GAS - MCF:	WATER - BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU - GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	INTERVAL STATUS:

INTERVAL C (As shown in Item #26)

DATE FIRST PRODUCED:	TEST DATE:	HOURS TESTED:	TEST PRODUCTION RATES: →	OIL - BBL:	GAS - MCF:	WATER - BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU - GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	INTERVAL STATUS:

INTERVAL D (As shown in Item #26)

DATE FIRST PRODUCED:	TEST DATE:	HOURS TESTED:	TEST PRODUCTION RATES: →	OIL - BBL:	GAS - MCF:	WATER - BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU - GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	INTERVAL STATUS:

32. DISPOSITION OF GAS (Sold, Used for Fuel, Vented, Etc.)

33. SUMMARY OF POROUS ZONES (Include Aquifers):

Show all important zones of porosity and contents thereof. Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries.

34. FORMATION (Log) MARKERS:

Formation	Top (MD)	Bottom (MD)	Descriptions, Contents, etc.	Name	Top (Measured Depth)
PAVED DOLOMITE	6234	6350	100% LITE GRAY PACKSTONE		
"	6660	6760	"		
"	7342	7390	"		
	6648	6818	DST #1 weak blow 1H 3572; PF 33-82; ISI 2811 FH 3522; FF 86-169; FSI 2809 REC 2000cc dly mud DST #2 MISRUN		
	7224	7943			

35. ADDITIONAL REMARKS (Include plugging procedure)

12/3/2010 set GBA @ 7850'; 12/17/2010 b27 50' cmt; PBD 7800'; b27 50' cmt pbd 7750'; CIBP 7300';
12/18/2010 pump 25 sx 7300-7200'; pump 26 sx 3900-3700'; tag; perf 6 holes @ 1370'; displace
CSG + annulus w/ freshwater - SWI pending final R/A

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records.

NAME (PLEASE PRINT) STEVEN R. HASH TITLE CONSULTING ENGINEER - EXACT
SIGNATURE Steven R. Hash DATE 8/8/2011

This report must be submitted within 30 days of

- completing or plugging a new well
- drilling horizontal laterals from an existing well bore
- recompleting to a different producing formation
- reentering a previously plugged and abandoned well
- significantly deepening an existing well bore below the previous bottom-hole depth
- drilling hydrocarbon exploratory holes, such as core samples and stratigraphic tests

* ITEM 20: Show the number of completions if production is measured separately from two or more formations.

** ITEM 24: Cement Top - Show how reported top(s) of cement were determined (circulated (CIR), calculated (CAL), cement bond log (CBL), temperature survey (TS)).

Send to: Utah Division of Oil, Gas and Mining
1594 West North Temple, Suite 1210
Box 145801
Salt Lake City, Utah 84114-5801

Phone: 801-538-5340

Fax: 801-359-3940

EXACT Engineering, Inc.

20 E. 5th St., Suite 310, Tulsa, OK 74103

www.exactengineering.com

office 918.599.9400 fax 918.599.9401

Steven R. Hash, P.E.
Licensed Professional Engineer
stevehash@exactengineering.com

CONFIDENTIAL

August 15, 2010

Utah Division of Oil, Gas & Mining
1594 West North Temple, Suite 1210
Salt Lake City, UT 84114-5801

RECEIVED
AUG 17 2011
DIV. OF OIL, GAS & MINING

Re: Completion Report – Form 8 Documents
Python AG, LLC – Rocky Ridge 33-1 well
375' FNL and 1054' FWL of Sec 33
NE NW NW Sec 33 T17S – R06W
Millard County, UT

43.627.50001

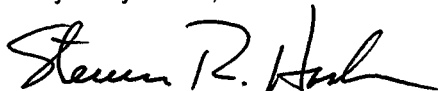
Gentlemen,

On behalf of Python AG, LLC of 1818 Moore Blvd, Unit 214, Davis, CA 95616, (530) 220-3463, we are enclosing the Geologic Report, Drill Stem Test Report, Directional Survey Report, Mud Log and open-hole Electric Logs for the captioned exploratory well.

Please note the NEW ADDRESS for Python AG, LLC (the Operator) as shown immediately above.

We continue to ask that all information pertaining to this well remain CONFIDENTIAL.

Very Truly Yours,



Steven R. Hash, P.E.
Consulting Engineer

copy: Python AG, LLC; Audrey Antonov
file

Python AG, LLC
Rocky Ridge #33-1
NW/NW Sec. 33, T17S, R6W
Millard County, UT

CONFIDENTIAL

Well Data Summary

Well Name	Rocky Ridge #33-1
Operator	Python AG, LLC
Surface Location	NW/NW Sec. 33,T 17S,R6W
API #	043-027-5001
Well Classification	Wildcat
Drilling Contractor	Patterson #77
Elevation-Ground level	4604'
Kelly Bushing	4621'
Spud Date	6-17-2010
TD Date	7-16-10
Surface Casing	9 5/8" Sat @ 1270'
Hole Size	12 3/4", 8 3/4"
Sample Interval	1270'-7943'
Gas Detection	1270'-7943'
Open Hole Logs	GR,SP,Cal.,Dual&Micro Laterolog,Neutron/Density
Mud Type	Saturated Salt Flowzan Poly
Drill Stem Test #1	6648'-6818' Paleozoic carbonate
Drill Stem Test #2	7224'-7943' Paleozoic carbonate (miss run)
Well Status	Running 5 1/2" to Test through Casing

Formation Tops
Rocky Ridge #33-1
Kelly Bushing 4621'

Formation	Spl Top (md)	Spl Top (tvd)	Log Top (md)	Log (tvd)	Sub Sea
Lake Bonnaville	Surface				
South Flat (Valley Fill)	1706'	1706'	1710'	1710'	2911'
Flagstaff	3596'	3595'	3596'	3595'	1026'
North Horn	3742'	3741'	3756'	3755'	866'
Arapien	3860'	3859'	3876'	3875'	746'
Paleozoic (undefined)	4820'	4818'	4830'	4828'	-207'
Total Depth Driller	7943'	Logger	7943'		

Formation Evaluation

**Python AG, LLC
Rocky Ridge #33-1**

Decollement Consulting rigged up Patterson Rig #77, June 17, 2010. Gas detection and lagged samples started under 1270 feet of 9 5/8" surface casing and were collected to total depth (7943'). H₂S safety equipment was rigged up on location due to the Paleozoic carbonate rock suite. No cores were cut. E-Logs were run from surface casing to total depth. Total depth was reached on July 16, 2010. No gas or sample shows were found during drilling operations. Palynology and thermal maturation studies were run from (3590-7480) in 90' intervals. The study was conducted to determine the geologic age of the rocks drilled and there organic value. Brock Engineering did the log analysis and found three zones that had porosity and resistivity (6234'-6350'), (6660'-6760') and (7342'-7390'). Drill Stem Tests were run over the 2nd and 3rd zones. DST #1 recovered drilling mud and DST #2 was a miss run. The charts show a good test and good packer seats. The recovery and flows from DST #1 indicate a tight reservoir. Casing was run to total depth to test through casing

Drill Strem Test Report
Python AG, LLC
Rocky Ridge Report #33-1

Date: 7-19-2010

Testing Company: Bulldog Testers

Test Type: Anchor Straddle

Interval: DST #1, 6648'-6818'

Times: 30,60,60,120

Flow Descriptions: 1/8" Choke, Open with weak blow, held through out, Shut In, 2nd Open with weak blow, held through out.

Pressures:

IH	3572	PF	33-82	ISI	2811
FH	3522	FF	86-169	FSI	2809

Recoveries: Sampler: 2000cc Drilling Mud .048@70 deg.F
Drill Pipe: 279' Drilling, Rw. .048@70 deg.F

Temperture: 195 deg.F

Date: 7-21-2010

Testing Company: Bulldog Testers

Test Type: Anchor Straddle

Interval: DST #2, 7224'-7943' Miss Run, Anchor Failed

Sample Descriptions

Lake Bonnaville Deposites

1250-80	CLAYSTONE-100% White, soft, calcareous, clay.
1280-1310	CLAYSTONE-100% White, soft, calcareous, clay.
1310-40	CLAYSTONE-40% White, soft, calcareous, clay. SILTSTONE-20% Light gray, argillaceous, soft to firm, blocky. SANDSTONE-40% White, clear, quartzose, fine (lower) to medium (upper) grained, sub rounded to rounded, unconsolidated.
1340-70	SHALE-20% Varied color, medium to dark gray, light red, red orange, soft to firm, blocky. SANDSTONE-80% White, clear, quartzose, fine (lower) to medium (upper) grained, sub rounded to rounded, unconsolidated.
1370-1400	SHALE-20% Varied color, medium to dark gray, light red, red orange, soft to firm, blocky. SANDSTONE-80% White, clear, quartzose, fine (lower) to medium (upper) grained, sub rounded to rounded, unconsolidated.
1400-30	CLAYSTONE-20% White, soft, calcareous, clay, with floating quartz grains. SANDSTONE-80% White, clear, quartzose, fine (lower) to medium (upper) grained, sub rounded to rounded, unconsolidated.
1430-60	CLAYSTONE-100% White, soft, calcareous, clay, with floating quartz grains.
1460-90	CLAYSTONE-100% White to tan, soft, calcareous, clay, with floating quartz grains.
1490-1520	CLAYSTONE-100% White to tan, soft, calcareous, clay, 40% floating quartz grains.
1520-50	CLAYSTONE-100% White to tan, soft, calcareous, clay, 1% floating quartz grains.

- 1550-80 CLAYSTONE-100% White to tan, soft, calcareous, clay, 1% floating quartz grains.
- 1580-1610 CLAYSTONE-100% Light brown to tan, soft, calcareous, clay, 1% floating quartz grains.
- 1610-40 CLAYSTONE-100% Light brown to tan, soft, calcareous, clay, 1% floating quartz grains
- 1640-70 CLAYSTONE-100% Light brown to tan, soft, calcareous, clay, 30% floating quartz grains.
- 1670-1700 CLAYSTONE-100% Light brown to tan, soft, calcareous, clay, 30% floating quartz grains.

South Flat Formation (Valley Fill)

- 1700-30 SANDSTONE-100% Light red orange, white, clear, quartzose, fine (upper) to course (upper) grained, sub rounded, fair to poor sorted, calcareous matrix, friable to hard, 95% unconsolidated, trace, limestone, light brown, microcrystalline, hard, dense, mudstone.
- 1730-60 SANDSTONE-100% Light red orange, white, clear, quartzose, fine (upper) to course (upper) grained, sub rounded, fair to poor sorted, calcareous matrix, friable to hard, 95% unconsolidated, trace, limestone, light brown, microcrystalline, hard, dense, mudstone.
- 1760-90 SANDSTONE-80% Light red orange, white, clear, quartzose, fine (upper) to course (upper) grained, sub rounded, fair to poor sorted, calcareous matrix, friable to hard, 95% unconsolidated, trace, limestone, light brown, microcrystalline, hard, dense, mudstone.
LIMESTONE-20% Light brown, tan, light red, crystalline, dense, mudstone.
- 1790-1820 SANDSTONE-90% Light red orange, white, clear, quartzose, fine (upper) to course (upper) grained, sub rounded, fair to poor sorted, calcareous matrix, friable to hard, 80% unconsolidated, trace, limestone, light brown, microcrystalline, hard, dense, mudstone.
LIMESTONE-10% Light brown, tan, light red, crystalline, dense, mudstone, grains have weathered edges.
- 1820-50 SANDSTONE-80% Light red orange, white, clear, quartzose, fine (upper) to course (upper) grained, sub rounded, fair to poor sorted, calcareous

matrix, friable to hard, 95% unconsolidated, trace, limestone, light brown, microcrystalline, hard, dense, mudstone, abundant fine to medium gravel.
LIMESTONE-20% Light brown, tan, light red, crystalline, dense, mudstone.

- 1850-80 SANDSTONE-70% Light red orange, white, clear, quartzose, fine (upper) to coarse (upper) grained, sub rounded, fair to poor sorted, calcareous matrix, friable to hard, 90% unconsolidated, trace, limestone, light brown, microcrystalline, hard, dense, mudstone.
LIMESTONE-30% Light brown, tan, light red, crystalline, dense, hard, varied color, mudstone.
- 1880-1910 SANDSTONE-100% Light red orange, varied color, white, clear, quartzose, fine (upper) to coarse (lower) grained, sub rounded, fair to poor sorted, calcareous matrix, friable to hard, 99% unconsolidated, trace, limestone, light brown, microcrystalline, hard, dense, mudstone.
- 1910-40 SANDSTONE-100% Light red orange, white, clear, quartzose, fine (upper) to coarse (upper) grained, sub rounded, fair to poor sorted, calcareous matrix, friable to hard, 90% unconsolidated, trace, limestone, light brown, microcrystalline, hard, dense, mudstone.
LIMESTONE-30% Light brown, tan, light red, crystalline, dense, hard, varied color, mudstone.
- 1940-70 SANDSTONE-100% Light red orange, varied color, white, clear, quartzose, fine (upper) to coarse (lower) grained, sub rounded, fair to poor sorted, calcareous matrix, friable to hard, 99% unconsolidated, trace, limestone, light brown, microcrystalline, hard, dense, mudstone.
- 1970-2000 SANDSTONE-100% Light red orange, varied color, white, clear, quartzose, fine (upper) to coarse (lower) grained, sub rounded, fair to poor sorted, calcareous matrix, friable to hard, 99% unconsolidated, trace, limestone, light brown, microcrystalline, hard, dense, mudstone.
- 2000-30 SANDSTONE-100% Light red orange, varied color, white, clear, quartzose, fine (upper) to coarse (lower) grained, sub rounded, fair to poor sorted, calcareous matrix, friable to hard, 70% unconsolidated, no show, trace, limestone, light brown, microcrystalline, hard, dense, mudstone.
- 2030-60 SANDSTONE-100% Light red orange, varied color, white, clear, quartzose, fine (upper) to coarse (lower) grained, sub rounded, fair to poor sorted, calcareous matrix, friable to hard, 99% unconsolidated, trace, limestone, light brown, microcrystalline, hard, dense, mudstone.

2060-90	SANDSTONE-100% Light red orange, varied color, white, clear, quartzose, fine (upper) to course (lower) grained, sub rounded, fair to poor sorted, calcareous matrix, friable to hard, 98% unconsolidated, trace, limestone, light brown, microcrystalline, hard, dense, mudstone.
2090-2120	SANDSTONE-100% Light red orange, varied color, white, clear, quartzose, fine (upper) to course (lower) grained, sub rounded, fair to poor sorted, calcareous matrix, friable to hard, 98% unconsolidated, trace, limestone, light brown, microcrystalline, hard, dense, mudstone.
2120-50	SANDSTONE-100% Light red orange, varied color, white, clear, quartzose, fine (upper) to course (lower) grained, sub rounded, fair to poor sorted, calcareous matrix, friable to hard, 95% unconsolidated, trace, limestone, light brown, microcrystalline, hard, dense, mudstone.
2150-80	SANDSTONE-100% Light red orange, varied color, white, clear, quartzose, fine (upper) to course (lower) grained, sub rounded, fair to poor sorted, calcareous matrix, friable to hard, 98% unconsolidated, trace, limestone, light brown, microcrystalline, hard, dense, mudstone.
2180-2210	SANDSTONE-100% Light red orange, varied color, white, clear, quartzose, fine (upper) to course (lower) grained, sub rounded, fair to poor sorted, calcareous matrix, friable to hard, 100% unconsolidated, trace, limestone, light brown, microcrystalline, hard, dense, mudstone.
2210-40	SANDSTONE-100% Light red orange, varied color, white, clear, quartzose, fine (upper) to course (lower) grained, sub rounded, fair to poor sorted, calcareous matrix, friable to hard, 98% unconsolidated, trace, limestone, light brown, microcrystalline, hard, dense, mudstone.
2240-70	SANDSTONE-100% Light red orange, varied color, white, clear, quartzose, fine (upper) to course (lower) grained, sub rounded, fair to poor sorted, calcareous matrix, friable to hard, 98% unconsolidated, trace, limestone, light brown, microcrystalline, hard, dense, mudstone.
2270-2300	SANDSTONE-100% Light red orange, varied color, white, clear, quartzose, fine (upper) to course (lower) grained, sub rounded, fair to poor sorted, calcareous matrix, friable to hard, 98% unconsolidated, trace, limestone, light brown, microcrystalline, hard, dense, mudstone.
2300-30	SANDSTONE-100% Light red orange, varied color, white, clear, quartzose, fine (upper) to course (lower) grained, sub rounded, fair to poor sorted, calcareous matrix, friable to hard, 98% unconsolidated, trace, limestone, light brown, microcrystalline, hard, dense, mudstone.

- 2330-60 SANDSTONE-100% Light red orange, varied color, white, clear, quartzose, fine (upper) to course (lower) grained, sub rounded, fair to poor sorted, calcareous matrix, friable to hard, 98% unconsolidated, trace, limestone, light brown, microcrystalline, hard, dense, mudstone.
- 2360-90 SANDSTONE-100% Light red orange, varied color, white, clear, quartzose, fine (upper) to course (lower) grained, sub rounded, fair to poor sorted, calcareous matrix, friable to hard, 98% unconsolidated, trace, limestone, light brown, microcrystalline, hard, dense, mudstone.
- 2390-2420 SANDSTONE-100% Light red orange, varied color, white, clear, quartzose, fine (upper) to course (lower) grained, sub rounded, fair to poor sorted, calcareous matrix, friable to hard, 98% unconsolidated, trace, limestone, light brown, microcrystalline, hard, dense, mudstone.
- 2420-50 SANDSTONE-100% Light red orange, varied color, white, clear, quartzose, fine (upper) to course (lower) grained, sub rounded, fair to poor sorted, calcareous matrix, friable to hard, 98% unconsolidated, trace, limestone, light brown, microcrystalline, hard, dense, mudstone.
- 2450-80 SANDSTONE-100% Light red orange, varied color, white, clear, quartzose, fine (upper) to course (lower) grained, sub rounded, fair to poor sorted, calcareous matrix, friable to hard, 98% unconsolidated, trace, limestone, light brown, microcrystalline, hard, dense, mudstone.
- 2480-2510 SANDSTONE-100% Light red orange, varied color, white, clear, quartzose, fine (upper) to course (lower) grained, sub rounded, fair to poor sorted, calcareous matrix, friable to hard, 80% unconsolidated, trace, limestone, light brown, microcrystalline, hard, dense, mudstone.
- 2510-40 SANDSTONE-80% Light red orange, white, clear, quartzose, fine (upper) to course (upper) grained, sub rounded, fair to poor sorted, calcareous matrix, friable to hard, 40% unconsolidated, trace, limestone, light brown, microcrystalline, hard, dense, mudstone.
LIMESTONE-20% Light brown, tan, light red, crystalline, dense, hard, varied color, chalky, lithographic, mudstone.
- 2540-70 SANDSTONE-90% Light red orange, white, clear, quartzose, fine (upper) to course (upper) grained, sub rounded, fair to poor sorted, calcareous matrix, friable to hard, 98% unconsolidated, trace, limestone, light brown, microcrystalline, hard, dense, mudstone.
LIMESTONE-10% Light brown, tan, light red, crystalline, dense, hard, varied color, chalky, lithographic, mudstone.

- 2570-2600 SANDSTONE-100% Light red orange, varied color, white, clear, quartzose, fine (upper) to course (lower) grained, sub rounded, fair to poor sorted, calcareous matrix, friable to hard, 80% unconsolidated, trace, limestone, light brown, microcrystalline, hard, dense, mudstone.
- 2600-30 SANDSTONE-100% Light red orange, varied color, white, clear, quartzose, fine (upper) to course (lower) grained, sub rounded, fair to poor sorted, calcareous matrix, friable to hard, 70% unconsolidated, soft clay matrix, limey, trace, limestone, light brown, microcrystalline, hard, dense, mudstone.
- 2630-60 SANDSTONE-100% Light red orange, varied color, white, clear, quartzose, fine (upper) to course (lower) grained, sub rounded, fair to poor sorted, calcareous matrix, friable to hard, 100% unconsolidated, soft clay matrix, limey, trace, limestone, light brown, microcrystalline, hard, dense, mudstone.
- 2660-90 SANDSTONE-100% Light red orange, white, clear, quartzose, fine (upper) to course (upper) grained, sub rounded, fair to poor sorted, calcareous matrix, friable to hard, 100% unconsolidated, trace, limestone, light brown, microcrystalline, hard, dense, mudstone.
- 2690-2720 SANDSTONE-90% Light red orange, white, clear, quartzose, fine (upper) to course (upper) grained, sub rounded, fair to poor sorted, calcareous matrix, friable to hard, 98% unconsolidated, trace, limestone, light brown, microcrystalline, hard, dense, mudstone.
LIMESTONE-10% Light brown, tan, light red, crystalline, dense, hard, varied color, chalky, lithographic, mudstone.
- 2720-50 SANDSTONE-100% Light red orange, white, clear, quartzose, fine (upper) to course (upper) grained, sub rounded, fair to poor sorted, calcareous matrix, friable to hard, 70% unconsolidated, trace, limestone, light brown, microcrystalline, hard, dense, mudstone.
- 2750-80 SANDSTONE-100% Light red orange, white, clear, quartzose, fine (upper) to course (upper) grained, sub rounded, fair to poor sorted, calcareous matrix, friable to hard, 90% unconsolidated, trace, limestone, light brown, microcrystalline, hard, dense, mudstone.
- 2780-2810 SANDSTONE-100% Light red orange, white, clear, quartzose, fine (upper) to course (upper) grained, sub rounded, fair to poor sorted, calcareous matrix, friable to hard, 95% unconsolidated, trace, limestone, light brown, microcrystalline, hard, dense, mudstone.

- 2810-40 SANDSTONE-100% Light red orange, white, clear, quartzose, fine (upper) to course (upper) grained, sub rounded, fair to poor sorted, calcareous matrix, friable to hard, 85% unconsolidated, trace, limestone, light brown, microcrystalline, hard, dense, mudstone.
- 2840-70 SANDSTONE-100% Light red orange, white, clear, quartzose, fine (upper) to course (upper) grained, sub rounded, fair to poor sorted, calcareous matrix, friable to hard, 95% unconsolidated, trace, limestone, light brown, microcrystalline, hard, dense, mudstone.
- 2870-2900 SANDSTONE-100% Light red orange, white, clear, quartzose, fine (upper) to course (upper) grained, sub rounded, fair to poor sorted, calcareous matrix, friable to hard, 98% unconsolidated, trace, limestone, light brown, microcrystalline, hard, dense, mudstone.
- 2900-30 SANDSTONE-100% Light red orange, white, clear, quartzose, fine (upper) to course (upper) grained, sub rounded, fair to poor sorted, calcareous matrix, friable to hard, 98% unconsolidated, trace, limestone, light brown, microcrystalline, hard, dense, mudstone.
- 2930-60 SANDSTONE-100% Light red brown, red orange, white, clear, quartzose, fine (upper) to course (upper) grained, sub rounded, fair to poor sorted, calcareous cement, clay matrix, friable to hard, 90% unconsolidated, trace, limestone, light brown, microcrystalline, hard, dense, mudstone.
- 2960-90 SANDSTONE-100% Light red brown, red orange, white, clear, quartzose, fine (upper) to course (upper) grained, sub rounded, fair to poor sorted, calcareous cement, clay matrix, friable to hard, 98% unconsolidated, trace, limestone, light brown, microcrystalline, hard, dense, mudstone.
- 2990-3020 SANDSTONE-100% Light red brown, red orange, white, clear, quartzose, fine (upper) to course (upper) grained, sub rounded, fair to poor sorted, calcareous cement, clay matrix, friable to hard, 98% unconsolidated, trace, limestone, light brown, microcrystalline, hard, dense, mudstone.
- 3020-50 SANDSTONE-100% Light red brown, red orange, white, clear, quartzose, fine (upper) to course (upper) grained, sub rounded, fair to poor sorted, calcareous cement, clay matrix, friable to hard, 98% unconsolidated, trace, limestone, light brown, microcrystalline, hard, dense, mudstone.
- 3050-80 SANDSTONE-100% Light red brown, red orange, white, clear, quartzose, fine (upper) to course (upper) grained, sub rounded, fair to poor sorted, calcareous cement, clay matrix, friable to hard, 95% unconsolidated, trace, limestone, light brown, microcrystalline, hard, dense, mudstone.

- 3080-3110 SANDSTONE-100% Light red brown, red orange, white, clear, quartzose, fine (upper) to course (upper) grained, sub rounded, fair to poor sorted, calcareous cement, clay matrix, friable to hard, 98% unconsolidated, trace, limestone, light brown, microcrystalline, hard, dense, mudstone.
- 3110-40 SANDSTONE-100% Light red brown, red orange, white, clear, quartzose, fine (upper) to course (upper) grained, sub rounded, fair to poor sorted, calcareous cement, clay matrix, friable to hard, 98% unconsolidated, trace, limestone, light brown, microcrystalline, hard, dense, mudstone.
- 3140-70 SANDSTONE-100% Light red brown, red orange, white, clear, quartzose, fine (upper) to course (upper) grained, sub rounded, fair to poor sorted, calcareous cement, clay matrix, friable to hard, 100% unconsolidated, trace, limestone, light brown, microcrystalline, hard, dense, mudstone.
- 3170-3200 SANDSTONE-100% Light red brown, red orange, white, clear, quartzose, fine (upper) to course (upper) grained, sub rounded, fair to poor sorted, calcareous cement, clay matrix, friable to hard, 95% unconsolidated, trace, limestone, light brown, microcrystalline, hard, dense, mudstone.
- 3200-30 SANDSTONE-100% Light red brown, red orange, white, clear, quartzose, fine (upper) to course (upper) grained, sub rounded, fair to poor sorted, calcareous cement, clay matrix, friable to hard, 98% unconsolidated, trace, limestone, light brown, microcrystalline, hard, dense, mudstone.
- 3230-60 SANDSTONE-100% Light red brown, red orange, white, clear, quartzose, fine (upper) to course (upper) grained, sub rounded, fair to poor sorted, calcareous cement, clay matrix, friable to hard, 90% unconsolidated, trace, limestone, light brown, microcrystalline, hard, dense, mudstone.
- 3260-90 SANDSTONE-100% Light red brown, red orange, white, clear, quartzose, fine (upper) to very course (upper) grained, conglomeratic, sub rounded, fair to poor sorted, calcareous cement, clay matrix, friable to hard, 80% unconsolidated, trace, limestone, light brown, microcrystalline, hard, dense, mudstone.
- 3290-3320 SANDSTONE-100% Light red brown, red orange, white, clear, quartzose, fine (upper) to very course (upper) grained, conglomeratic, sub rounded, fair to poor sorted, calcareous cement, clay matrix, friable to hard, 70% unconsolidated, trace, limestone, light brown, microcrystalline, hard, dense, mudstone.
- 3320-50 SANDSTONE-100% Light red brown, red orange, white, clear, quartzose, fine (upper) to very course (upper) grained, conglomeratic, sub rounded, fair to poor sorted, calcareous cement, clay matrix, friable to hard, 90%

unconsolidated, no show, trace limestone, light brown, microcrystalline, hard, dense, mudstone.

- 3350-80 SANDSTONE-100% Light red brown, red orange, white, clear, quartzose, fine (upper) to very coarse (upper) grained, conglomeratic, sub rounded, fair to poor sorted, calcareous cement, clay matrix, friable to hard, 95% unconsolidated, no show, trace limestone, light brown, microcrystalline, hard, dense, mudstone.
- 3380-3410 SANDSTONE-100% Light red brown, red orange, white, clear, quartzose, fine (upper) to very coarse (upper) grained, conglomeratic, sub rounded, fair to poor sorted, calcareous cement, clay matrix, friable to hard, 90% unconsolidated, no show, trace limestone, light brown, microcrystalline, hard, dense, mudstone.
- 3410-40 SANDSTONE-100% Light red brown, red orange, white, clear, quartzose, fine (upper) to very coarse (upper) grained, conglomeratic, sub rounded, fair to poor sorted, calcareous cement, clay matrix, friable to hard, 85% unconsolidated, no show, trace limestone, light brown, microcrystalline, hard, dense, mudstone.
- 3440-70 SANDSTONE-100% Light red brown, red orange, white, clear, quartzose, fine (upper) to very coarse (upper) grained, conglomeratic, sub rounded, fair to poor sorted, calcareous cement, clay matrix, friable to hard, 90% unconsolidated, no show, trace limestone, light brown, microcrystalline, hard, dense, mudstone.
- 3470-3500 SANDSTONE-100% Light red brown, red orange, white, clear, quartzose, fine (upper) to very coarse (upper) grained, conglomeratic, sub rounded, fair to poor sorted, calcareous cement, clay matrix, friable to hard, 80% unconsolidated, no show, trace limestone, light brown, microcrystalline, hard, dense, mudstone.
- 3500-30 SANDSTONE-100% Light red brown, red orange, white, clear, quartzose, fine (upper) to very coarse (upper) grained, conglomeratic, sub rounded, fair to poor sorted, calcareous cement, clay matrix, friable to hard, 90% unconsolidated, no show, trace limestone, light brown, microcrystalline, hard, dense, mudstone.
- 3530-60 SANDSTONE-100% Light red brown, red orange, white, clear, quartzose, fine (upper) to very coarse (upper) grained, conglomeratic, sub rounded, fair to poor sorted, calcareous cement, clay matrix, friable to hard, 80%

unconsolidated, no show, trace limestone, light brown, microcrystalline, hard, dense, mudstone.

3560-90 SANDSTONE-100% Light red brown, red orange, white, clear, quartzose, fine (upper) to very coarse (upper) grained, conglomeratic, sub rounded, fair to poor sorted, calcareous cement, clay matrix, friable to hard, 80% unconsolidated, no show, trace limestone, light brown, microcrystalline, hard, dense, mudstone.

Flagstaff

3590-3620 SHALE-100% White, light gray, dolomitic, limey in part, chalky in part, light gray green in part, sandy in part, anhydritic in part, soft to firm, marly.

3620-50 SHALE-100% Gray, light gray brown, gray green, dolomitic, limey in part, chalky in part, light gray green in part, silty and sandy in part, anhydritic in part, soft to firm, marly.

3650-80 SHALE-70% Gray, light gray brown, gray green, dolomitic, limey in part, chalky in part, light gray green in part, silty and sandy in part, anhydritic in part, soft to firm, marly.
SANDSTONE-30% White, clear, very fine (upper) to fine (upper) grained, sub angular, fair to poor sorted, clay matrix, calcareous cement, tight, no show.

3680-3710 SHALE-60% Gray, light gray brown, gray green, dolomitic, limey in part, chalky in part, light gray green in part, silty and sandy in part, anhydritic in part, soft to firm, marly.
SANDSTONE-40% White, clear, very fine (upper) to fine (upper) grained, sub angular, fair to poor sorted, clay matrix, calcareous cement, tight, no show.

North Horn

3710-40 SHALE-50% Gray, light gray brown, gray green, dolomitic, limey in part, chalky in part, light gray green in part, silty and sandy in part, anhydritic in part, soft to firm, marly.
SANDSTONE-50% White, clear, very fine (upper) to fine (upper) grained, sub angular, fair to poor sorted, clay matrix, calcareous cement, tight, no show.

- 3740-70 SHALE-20% Gray, light gray brown, gray green, dolomitic, limey in part, chalky in part, light gray green in part, silty and sandy in part, anhydritic in part, soft to firm, marly.
SANDSTONE-80% White, clear, very fine (upper) to fine (upper) grained, sub angular, fair to poor sorted, clay matrix, calcareous cement, tight, no show.
- 3770-3800 SHALE-10% Gray, light gray brown, gray green, dolomitic, limey in part, chalky in part, light gray green in part, silty and sandy in part, anhydritic in part, soft to firm, marl, bentonitic.
SANDSTONE-90% White, clear, quartzose, very fine (upper) to fine (upper) grained, sub angular, fair to poor sorted, clay matrix, calcareous cement, 40% unconsolidated, tight, no show.
- 3800-30 SHALE-20% Gray, light gray brown, gray green, becoming red brown, light brown, dolomitic, limey in part, chalky in part, light gray green in part, silty and sandy in part, anhydritic in part, soft to firm, marl, bentonitic.
SANDSTONE-80% White, clear, quartzose, very fine (upper) to fine (upper) grained, sub angular, fair to poor sorted, clay matrix, calcareous cement, 40% unconsolidated, tight, no show.
- 3830-60 SHALE-10% Gray, light gray brown, gray green, becoming red brown, light brown, dolomitic, limey in part, chalky in part, light gray green in part, silty and sandy in part, anhydritic in part, soft to firm, marl, bentonitic.
SANDSTONE-90% White, clear, quartzose, very fine (upper) to fine (upper) grained, sub angular, fair to poor sorted, clay matrix, calcareous

Arapien

- 3860-90 SHALE-80% Light green, apple green, waxy, marly, soft to firm.
ANHYDRITE-20% White, clear, granular, nodular, crystalline.
- 3890-3920 SHALE-60% Light green, apple green, becoming red brown, silty and sandy, waxy, marly, soft to firm.
ANHYDRITE-40% White, clear, granular, nodular, translucent, chalky, crystalline.
- 3920-50 SHALE-60% Light green, apple green, becoming red brown, silty and sandy, waxy, marly, soft to firm.
ANHYDRITE-40% White, clear, granular, nodular, translucent, chalky, crystalline.
- 3950-80 SHALE-50% Red brown, silty and sandy, waxy, marly, soft to firm.

	ANHYDRITE-50% White, clear, granular, nodular, translucent, chalky, crystalline.
3980-4010	SHALE-30% Red brown, silty and sandy, waxy, marly, soft to firm. ANHYDRITE-70% White, clear, granular, nodular, translucent, chalky, crystalline.
4010-40	SHALE-20% Red brown, silty and sandy, waxy, marly, soft to firm. ANHYDRITE-80% White, clear, granular, nodular, translucent, chalky, crystalline.
4040-70	SHALE-10% Red brown, silty and sandy, waxy, marly, soft to firm. ANHYDRITE-80% White, clear, granular, nodular, translucent, chalky, crystalline. LIMESTONE-10% Brown, red brown, chalky, mudstone, argillaceous.
4070-4100	SHALE-40% Red brown, silty and sandy, waxy, marly, soft to firm, limey in part. ANHYDRITE-60% White, clear, gray, granular, nodular, translucent, chalky, crystalline, greasy texture in part.
4100-30	SHALE-30% Red brown, silty and sandy, waxy, marly, soft to firm, limey in part. ANHYDRITE-70% White, clear, gray, granular, nodular, translucent, chalky, crystalline, greasy texture in part.
4130-60	SHALE-20% Red brown, silty and sandy, waxy, marly, soft to firm, mudstone. ANHYDRITE-80% White, clear, granular, nodular, translucent, chalky, crystalline.
4160-4190	SHALE-30% Red brown, silty and sandy, waxy, marly, soft to firm, limey in part. ANHYDRITE-70% White, clear, gray, granular, nodular, translucent, chalky, crystalline, greasy texture in part.
4190-4220	SHALE-30% Red brown, silty and sandy, waxy, marly, soft to firm, limey in part. ANHYDRITE-70% White, clear, gray, granular, nodular, translucent, chalky, crystalline, greasy texture in part.
4220-50	SHALE-20% Red brown, silty and sandy, waxy, marly, soft to firm, limey in part. ANHYDRITE-80% White, clear, gray, granular, nodular, translucent, chalky, crystalline, greasy texture in part.

- 4250-80 SHALE-10% Red brown, silty and sandy, waxy, marly, soft to firm, limey in part.
ANHYDRITE-90% White, clear, gray, granular, nodular, translucent, chalky, crystalline, greasy texture in part.
- 4280-4310 SHALE-10% Red brown, silty and sandy, waxy, marly, soft to firm, limey in part.
ANHYDRITE-90% White, clear, gray, granular, nodular, translucent, chalky, crystalline, greasy texture in part.
- 4310-40 SHALE-30% Red brown, silty and sandy, waxy, marly, soft to firm, limey in part.
ANHYDRITE-70% White, clear, gray, granular, nodular, translucent, chalky, crystalline, greasy texture in part.
- 4340-70 SHALE-30% Red brown, silty and sandy, waxy, marly, soft to firm, limey in part.
ANHYDRITE-70% White, clear, gray, granular, nodular, translucent, chalky, crystalline, greasy texture in part.
- 4370-4400 SHALE-20% Red brown, silty and sandy, waxy, marly, soft to firm, limey in part.
ANHYDRITE-80% White, clear, gray, granular, nodular, translucent, chalky, crystalline, greasy texture in part.
- 4400-30 SHALE-40% Red brown, silty and sandy, waxy, marly, soft to firm, limey in part.
ANHYDRITE-60% White, clear, gray, granular, nodular, translucent, chalky, crystalline, greasy texture in part.
- 4430-60 SHALE-30% Red brown, silty and sandy, waxy, marly, soft to firm, limey in part.
ANHYDRITE-70% White, clear, gray, granular, nodular, translucent, chalky, crystalline, greasy texture in part.
- 4460-90 SHALE-40% Red brown, silty and sandy, waxy, marly, soft to firm, limey in part.
ANHYDRITE-60% White, clear, gray, granular, nodular, translucent, chalky, crystalline, greasy texture in part.
- 4490-4520 SHALE-20% Red brown, silty and sandy, waxy, marly, soft to firm, limey in part.
ANHYDRITE-80% White, clear, gray, granular, nodular, translucent, chalky, crystalline, greasy texture in part.

- 4520-50 SHALE-30% Red brown, silty and sandy, waxy, marly, soft to firm, limey in part.
ANHYDRITE-70% White, clear, gray, granular, nodular, translucent, chalky, crystalline, greasy texture in part.
- 4550-80 SHALE-40% Red brown, silty and sandy, waxy, marly, soft to firm, limey in part.
ANHYDRITE-60% White, clear, gray, granular, nodular, translucent, chalky, crystalline, greasy texture in part.
- 4580-4610 SHALE-30% Red brown, silty and sandy, waxy, marly, soft to firm, limey in part.
ANHYDRITE-70% White, clear, gray, granular, nodular, translucent, chalky, crystalline, greasy texture in part.
- 4610-40 SHALE-20% Red brown, silty and sandy, waxy, marly, soft to firm, limey in part.
ANHYDRITE-80% White, clear, gray, granular, nodular, translucent, chalky, crystalline, greasy texture in part.
- 4640-70 SHALE-20% Red brown, silty and sandy, waxy, marly, soft to firm, limey in part.
ANHYDRITE-80% White, clear, gray, granular, nodular, translucent, chalky, crystalline, greasy texture in part.
- 4670-4700 SHALE-50% Red brown, silty and sandy, waxy, marly, soft to firm, limey in part.
ANHYDRITE-50% White, clear, gray, granular, nodular, translucent, chalky, crystalline, greasy texture in part.
- 4700-30 SHALE-80% Red brown, silty and sandy, waxy, marly, soft to firm, limey in part.
ANHYDRITE-20% White, clear, gray, granular, nodular, translucent, chalky, crystalline, greasy texture in part.
- 4730-60 SHALE-90% Red brown, silty and sandy, waxy, marly, soft to firm, limey in part.
ANHYDRITE-10% White, clear, gray, granular, nodular, translucent, chalky, crystalline, greasy texture in part.
- 4760-90 SHALE-80% Red brown, silty and sandy, waxy, marly, soft to firm, limey in part.
ANHYDRITE-20% White, clear, gray, granular, nodular, translucent, chalky, crystalline, greasy texture in part.

- 4790-4820 SHALE-80% Red brown, silty and sandy, waxy, marly, soft to firm, limey in part.
ANHYDRITE-20% White, clear, gray, granular, nodular, translucent, chalky, crystalline, greasy texture in part.

Paleozoic

- 4820-50 SHALE-20% Red brown, silty and sandy, waxy, marly, soft to firm, limey in part.
DOLOMITE-80% Medium to dark gray, micro to cryptocrystalline, hard, dense, mudstone.
- 4850-80 SHALE-10% Red brown, silty and sandy, waxy, marly, soft to firm, limey in part.
DOLOMITE-90% Medium to dark gray, micro to cryptocrystalline, hard, dense, mudstone, calcite fracture in fill, fossil ghosts, shell fragments.
- 4880-4910 SHALE-30% Red brown, silty and sandy, waxy, marly, soft to firm, limey in part.
DOLOMITE-40% Medium to dark gray, micro to cryptocrystalline, hard, dense, mudstone, calcite fracture in fill, fossil ghosts, shell fragments.
SANDSTONE-30% White, clear, quartzose, very fine (upper) to fine (upper) grained, sub angular, fair to poor sorted, calcareous matrix, siliceous cement, hard, tight, chert fragments, tight, no show.
- 4910-40 SHALE-10% Red brown, silty and sandy, waxy, marly, soft to firm, limey in part.
DOLOMITE-70% Medium to dark gray, micro to cryptocrystalline, hard, dense, mudstone, calcite fracture in fill, fossil ghosts, shell fragments.
SANDSTONE-20% White, clear, quartzose, very fine (upper) to fine (upper) grained, sub angular, fair to poor sorted, calcareous matrix, siliceous cement, hard, tight, chert fragments, tight, no show.
- 4940-70 DOLOMITE-80% Medium to dark gray, micro to cryptocrystalline, hard, dense, mudstone, calcite fracture in fill, fossil ghosts, shell fragments, limey, pyrite inclusions.
SANDSTONE-20% White, clear, quartzose, very fine (upper) to fine (upper) grained, sub angular, fair to poor sorted, calcareous matrix, siliceous cement, hard, tight, chert fragments, tight, no show.
- 5970-5000 DOLOMITE-80% Medium to dark gray, micro to cryptocrystalline, hard, dense, mudstone, calcite fracture in fill, fossil ghosts, shell fragments, limey, pyrite inclusions, chert fragments.

SANDSTONE-20% White, clear, quartzose, very fine (upper) to fine (upper) grained, sub angular, fair to poor sorted, calcareous matrix, siliceous cement, hard, tight, chert fragments, tight, no show.

- 5000-30 DOLOMITE-90% Medium to dark gray, light gray in part, micro to cryptocrystalline, hard, dense, mudstone, calcite fracture in fill, fossil ghosts, shell fragments, limey, pyrite inclusions, chert fragments.
SANDSTONE-10% White, clear, quartzose, very fine (upper) to fine (upper) grained, sub angular, fair to poor sorted, calcareous matrix, siliceous cement, hard, tight, chert fragments, tight, no show.
- 5030-60 DOLOMITE-100% Medium to dark gray, micro to cryptocrystalline, hard, dense, mudstone, calcite fracture in fill, fossil ghosts, shell fragments, limey, pyrite inclusions, chert fragments.
- 5060-90 DOLOMITE-100% Medium to dark gray, micro to cryptocrystalline, hard, dense, mudstone, calcite fracture in fill, fossil ghosts, shell fragments, limey, pyrite inclusions, chert fragments, light to medium gray, sucrosic texture, very fine to fine crystalline.
- 5090-5120 DOLOMITE-100% Medium to dark gray, micro to cryptocrystalline, hard, dense, mudstone, calcite fracture in fill, fossil ghosts, shell fragments, limey, pyrite inclusions, chert fragments, light to medium gray, sucrosic texture, very fine to fine crystalline, becoming packstone to wackestone.
- 5120-50 DOLOMITE-100% Medium to dark gray, micro to cryptocrystalline, hard, dense, mudstone, calcite fracture in fill, fossil ghosts, mottled, shell fragments, limey, pyrite inclusions, chert fragments, light to medium gray, sucrosic texture, very fine to fine crystalline, becoming packstone to wackestone.
- 5150-80 DOLOMITE-100% Medium to dark gray, micro to cryptocrystalline, hard, dense, mudstone, calcite fracture in fill, fossil ghosts, mottled, shell fragments, limey, pyrite inclusions, chert fragments, light to medium gray, sucrosic texture, very fine to fine crystalline, becoming packstone to wackestone.
- 5180-5210 DOLOMITE-100% Medium to dark gray, micro to cryptocrystalline, hard, dense, mudstone, calcite fracture in fill, fossil ghosts, mottled, shell fragments, limey, pyrite inclusions, chert fragments, light to medium gray, sucrosic texture, very fine to fine crystalline, becoming packstone to wackestone.

- 5210-40 DOLOMITE-100% Medium to dark gray, micro to cryptocrystalline, hard, dense, mudstone, calcite fracture in fill, fossil ghosts, mottled, shell fragments, limy, pyrite inclusions, chert fragments, light to medium gray, sucrosic texture, very fine to fine crystalline, becoming packstone to wackestone.
- 5240-70 DOLOMITE-100% Medium to dark gray, micro to cryptocrystalline, hard, dense, mudstone, calcite fracture in fill, fossil ghosts, mottled, shell fragments, limy, pyrite inclusions, chert fragments, light to medium gray, sucrosic texture, very fine to fine crystalline, becoming packstone to wackestone.
- 5270-5300 DOLOMITE-100% Medium to dark gray, micro to cryptocrystalline, hard, dense, mudstone, calcite fracture in fill, fossil ghosts, mottled, shell fragments, limy, pyrite inclusions, chert fragments, light to medium gray, sucrosic texture, very fine to fine crystalline, becoming packstone to wackestone.
- 5300-30 DOLOMITE-100% Medium to dark gray, micro to cryptocrystalline, hard, dense, mudstone, calcite fracture in fill, fossil ghosts, mottled, shell fragments, limy, pyrite inclusions, chert fragments, light to medium gray, sucrosic texture, very fine to fine crystalline, becoming packstone to wackestone.
- 5330-60 DOLOMITE-100% Medium to dark gray, micro to cryptocrystalline, hard, dense, mudstone, calcite fracture in fill, fossil ghosts, mottled, shell fragments, limy, pyrite inclusions, chert fragments, light to medium gray, sucrosic texture, very fine to fine crystalline, becoming packstone to wackestone with mudstone matrix.
- 5360-90 DOLOMITE-100% Light to medium gray, hard, mudstone, calcite fracture in fill, light to medium gray, sucrosic texture, chalky to crystalline, packstone to wackestone with mudstone matrix.
- 5390-5420 DOLOMITE-100% Light to medium gray, hard, very fine to microcrystalline, hard, dense, mudstone, calcite fracture in fill, light to medium gray, sucrosic texture, chalky to crystalline, packstone to wackestone with mudstone matrix.
- 5420-50 DOLOMITE-100% light gray to white, micropyrritic, micro to cryptocrystalline, hard, dense, mudstone.
- 5450-80 DOLOMITE-100% light gray to white, micropyrritic, micro to cryptocrystalline, hard, dense, mudstone, limy.

- 5480-5510 DOLOMITE-20% light gray to white, micropyrictic, micro to cryptocrystalline, hard, dense, mudstone, limey.
LIMESTONE-80% White,very fine to microcrystalline, sucrosic texture in part, hard, dense, mudstone.
- 5510-40 LIMESTONE-100% White,very fine to microcrystalline, sucrosic texture in part, hard, dense, mudstone.
- 5540-70 LIMESTONE-100% White, very fine to microcrystalline, sucrosic texture in part, hard, dense, mudstone, light gray, dolomitic, sandy, matrix in part, micropyrictic, no show.
- 5570-5600 LIMESTONE-100% White, light gray brown, very fine to microcrystalline, sucrosic texture in part, hard, dense, mudstone, light gray, dolomitic, sandy, matrix in part, micropyrictic, no
- 5600-30 LIMESTONE-100% White to light gray brown, very fine to microcrystalline, sucrosic texture in part, hard, dense, mudstone, light gray, dolomitic, sandy, matrix in part, micropyrictic, no
- 5630-60 DOLOMITE-70% light gray, cryptocrystalline, hard, dense, mudstone, limey.
LIMESTONE-30% White,very fine to microcrystalline, sucrosic texture in part, hard, dense, mudstone.
- 5660-90 DOLOMITE-10% light gray, cryptocrystalline, hard, dense, mudstone, limey.
LIMESTONE-90% White,very fine to microcrystalline, sucrosic texture in part, hard, dense, micropyrictic, mudstone.
- 5690-5720 DOLOMITE-30% light gray, cryptocrystalline, hard, dense, mudstone, limey.
LIMESTONE-70% White, tan, micro to cryptocrystalline, sucrosic texture in part, hard, dense, micropyrictic, mudstone.
- 5720-50 DOLOMITE-70% light gray, cryptocrystalline, hard, dense, mudstone, limey.
LIMESTONE-30% White, tan, micro to cryptocrystalline, sucrosic texture in part, hard, dense, micropyrictic, mudstone.
- 5750-80 DOLOMITE-70% light gray, cryptocrystalline, hard, dense, mudstone, limey.
LIMESTONE-30% White, tan, micro to cryptocrystalline, sucrosic texture in part, hard, dense, micropyrictic, mudstone.
- 5780-5810 DOLOMITE-10% light gray, cryptocrystalline, hard, dense, mudstone, limey.

	LIMESTONE-90% White, tan, micro to cryptocrystalline, sucrosic texture in part, hard, dense, micropyrritic, mudstone.
5810-40	LIMESTONE-100% White, tan, micro to cryptocrystalline, sucrosic texture in part, hard, dense, micropyrritic, mudstone.
5840-70	LIMESTONE-100% White, lavender, tan, micro to cryptocrystalline, sucrosic texture in part, hard, dense, micropyrritic, mudstone.
5870-5900	LIMESTONE-100% White, lavender, tan, micro to cryptocrystalline, sucrosic texture in part, hard, dense, micropyrritic, mudstone.
5900-30	LIMESTONE-100% White, lavender, tan, micro to cryptocrystalline, sucrosic texture in part, hard, dense, micropyrritic, mudstone.
5930-60	DOLOMITE-60% light gray, cryptocrystalline, hard, dense, mudstone, limey. LIMESTONE-40% White, tan, micro to cryptocrystalline, sucrosic texture in part, hard, dense, micropyrritic, mudstone.
5960-90	DOLOMITE-100% light gray, micro to cryptocrystalline, hard, dense, mudstone, limey.
5990-6020	DOLOMITE-100% light gray, very fine to microcrystalline, sucrosic texture in part, white dolomite fracture in fill, cryptocrystalline, hard, dense, mudstone, limey in part trace intercrystalline porosity.
6020-50	DOLOMITE-100% light gray, mottled, pyrite inclusions, very fine to microcrystalline, sucrosic texture in part, white dolomite fracture in fill, cryptocrystalline, hard, dense, mudstone, limey in part trace intercrystalline porosity.
6050-80	DOLOMITE-100% light gray to white, mottled, pyrite inclusions, very fine to microcrystalline, sucrosic texture in part, white dolomite fracture in fill, cryptocrystalline, hard, dense, mudstone, limey in part trace intercrystalline porosity.
6080-6110	DOLOMITE-100% light gray, mottled, pyrite inclusions, very fine to microcrystalline, sucrosic texture in part, white dolomite fracture in fill, cryptocrystalline, hard, dense, mudstone, limey in part trace intercrystalline porosity.
6110-40	DOLOMITE-100% light gray, mottled, pyrite inclusions, very fine to microcrystalline, sucrosic texture in part, white dolomite fracture in fill, cryptocrystalline, hard, dense, mudstone, limey in part trace intercrystalline porosity.

- 6140-70 DOLOMITE-100% light gray, mottled, pyrite inclusions, very fine to course crystalline, sucrosic texture in part, bioclastic hash, packstone to wackestone with mudstone matrix, white calcite fracture in fill, cryptocrystalline, hard, dense, mudstone, limey in part trace intercrystalline porosity.
- 6170-6200 DOLOMITE-100% light gray, light gray brown, white, mottled, pyrite inclusions, very fine to course crystalline, sucrosic texture in part, bioclastic hash, packstone to wackestone with mudstone matrix, white calcite fracture in fill, cryptocrystalline, hard, dense, mudstone, limey in part trace intercrystalline porosity.
- 6200-30 DOLOMITE-100% light gray, medium to dark gray, mottled, pyrite inclusions, very fine to course crystalline, sucrosic texture in part, bioclastic hash, packstone to wackestone with mudstone matrix, white calcite fracture in fill, cryptocrystalline, hard, dense, mudstone, limey in part trace intercrystalline porosity.
- 6230-60 DOLOMITE-100% light gray, very fine to fine crystalline, hard, dense, packstone to wackestone with mudstone matrix.
- 6260-90 DOLOMITE-100% light gray, very fine to fine crystalline, hard, dense, packstone to wackestone with mudstone matrix.
- 6290-6320 DOLOMITE-100% Medium to dark gray, mottled, very fine to microcrystalline, hard, dense, mudstone, fossile ghosts, bioclastic in part.
- 6320-50 DOLOMITE-100% Medium to dark gray, gray, mottled, very fine to microcrystalline, cryptocrystalline, white calcite fracture in fill, hard, dense, mudstone, fossile ghosts, bioclastic in part.
- 6350-80 DOLOMITE-100% Medium to dark gray, mottled, very fine to microcrystalline, white calcite fracture in fill, hard, dense, mudstone, fossile ghosts, bioclastic in part.
- 6380-6410 DOLOMITE-100% Light to medium gray, mottled, very fine to microcrystalline, white calcite fracture in fill, hard, dense, mudstone, fossile ghosts, bioclastic in part, packstone to wackestone with mudstone matrix.
- 6410-40 DOLOMITE-100% White, mottled, very fine to microcrystalline, hard, dense, mudstone.
- 6440-70 DOLOMITE-100% White, mottled, very fine to microcrystalline, hard, dense, mudstone.

- 6470-6500 DOLOMITE-100% White(10%), light gray, mottled, very fine to microcrystalline, sucrosic texture in part, hard, dense, mudstone.
- 6500-30 DOLOMITE-100% White to light gray, mottled, micro to cryptocrystalline, sucrosic texture in part, hard, dense, mudstone.
- 6530-60 DOLOMITE-100% White to light gray, mottled, very fine cryptocrystalline, sucrosic texture in part, hard, dense, mudstone.
- 6560-90 DOLOMITE-100% White to light gray, mottled, very fine cryptocrystalline, sucrosic texture in part, hard, dense, mudstone.
- 6590-6620 DOLOMITE-100% White to light gray, mottled, very fine cryptocrystalline, sucrosic texture in part, hard, dense, mudstone.
- 6620-50 DOLOMITE-100% White to light gray, mottled, very fine cryptocrystalline, sucrosic texture in part, hard, dense, mudstone, packstone to wackestone with mudstone matrix in part.
- 6650-80 DOLOMITE-100% White to light gray, mottled, very fine to cryptocrystalline, sucrosic texture in part, hard, dense, mudstone, packstone to wackestone with mudstone matrix in part.
- 6680-6710 DOLOMITE-100% White to light gray, mottled, very fine to microcrystalline, sucrosic texture in part, hard, dense, mudstone, packstone to grainstone with mudstone matrix in part, fossile ghosts, bioclastic in part.
- 6710-40 DOLOMITE-100% White to light gray, mottled, very fine to fine crystalline, hard, micro to cryptocrystalline in part, dense, mudstone, abundant white chalky calcite and anhydrite, trace pin point and inter crystalline porosity, no show.
- 6740-70 DOLOMITE-100% White to light gray, mottled, very fine to course crystalline, fossile ghosts, bioclastic in part, tight, no show.
- 6470-6500 DOLOMITE-100% White to light gray, mottled, very fine to course crystalline, fossile pellets and grains, bioclastic in part, tight, packstone to grainstone with mudstone matrix, abundant white chalky calcite fracture in fill, no show.
- 6500-30 DOLOMITE-100% White to light gray, mottled, very fine to microcrystalline, hard, dense, tight, fossile pellets and grains, bioclastic in part, tight, packstone to grainstone with mudstone matrix, abundant white chalky calcite fracture in fill, no show.

- 6530-60 DOLOMITE-100% White to light gray, mottled, very fine to microcrystalline, hard, dense, tight, fossile pellets and grains, bioclastic in part, tight, packstone to grainstone with mudstone matrix, abundant white chalky calcite fracture in fill, no show.
- 6560-90 DOLOMITE-100% White to light gray, mottled, very fine to microcrystalline, hard, dense, tight, fossile pellets and grains, bioclastic in part, tight, packstone to grainstone with mudstone matrix, abundant white chalky calcite fracture in fill, no show.
- 6590-6620 DOLOMITE-100% White to light gray, mottled, very fine to microcrystalline, hard, dense, tight, fossile pellets and grains, bioclastic in part, tight, packstone to grainstone with mudstone matrix, abundant white chalky calcite fracture in fill, no show.
- 6620-50 DOLOMITE-100% White to light gray, mottled, very fine to microcrystalline, hard, dense, tight, fossile pellets and grains, bioclastic in part, tight, packstone to grainstone with mudstone matrix, abundant white chalky calcite fracture in fill, no show.
- 6650-80 DOLOMITE-100% White to light gray, mottled, very fine to microcrystalline, hard, dense, tight, fossile pellets and grains, bioclastic in part, tight, packstone to grainstone with mudstone matrix, abundant white chalky calcite fracture in fill, no show.
- 6680-6710 DOLOMITE-100% White to light gray, mottled, very fine to microcrystalline, hard, dense, tight, fossile pellets and grains, bioclastic in part, tight, packstone to grainstone with mudstone matrix, abundant white chalky calcite fracture in fill, no show.
- 6710-40 DOLOMITE-100% White to light gray, mottled, very fine to microcrystalline, hard, dense, tight, fossile pellets and grains, bioclastic in part, tight, packstone to grainstone with mudstone matrix, abundant white chalky calcite fracture in fill, no show.
- 6740-70 DOLOMITE-100% Light gray to white, mottled, very fine to fine crystalline, sucrosic texture, hard, dense, tight, fossile pellets and grains, bioclastic in part, tight, packstone to grainstone with mudstone matrix, abundant white chalky calcite fracture in fill, no show.
- 6770-6800 DOLOMITE-100% Light gray to white, mottled, very fine to fine crystalline, sucrosic texture, hard, dense, tight, fossile pellets and grains, bioclastic in part, tight, packstone to grainstone with mudstone matrix, abundant white chalky calcite fracture in fill, no show.

- 6800-30 DOLOMITE-100% Light gray to white, mottled, very fine to medium crystalline, sucrosic texture, hard, dense, tight, fossile pellets and grains, bioclastic in part, tight, packstone to grainstone with mudstone matrix, abundant white chalky calcite fracture in fill, no show.
- 6830-60 DOLOMITE-100% Light gray to white, mottled, very fine to medium crystalline, sucrosic texture, hard, dense, tight, fossile pellets and grains, bioclastic in part, tight, packstone to grainstone with mudstone matrix, abundant white chalky calcite fracture in fill, no show.
- 6860-90 DOLOMITE-100% Light gray to white, mottled, very fine to medium crystalline, sucrosic texture, hard, dense, tight, fossile pellets and grains, bioclastic in part, tight, packstone to grainstone with mudstone matrix, abundant white chalky calcite fracture in fill, no show.
- 6890-6920 DOLOMITE-100% Light gray to white, mottled, very fine to medium crystalline, sucrosic texture, hard, dense, tight, fossile pellets and grains, bioclastic in part, tight, packstone to grainstone with mudstone matrix, abundant white chalky calcite fracture in fill, no show.
- 6920-50 DOLOMITE-100% Light to medium gray, very fine to microcrystalline, hard, dense, tight, abundant white chalky calcite fracture in fill, no show.
- 6950-80 DOLOMITE-100% Light to medium gray, mottled, very fine to medium crystalline, sucrosic texture, hard, dense, tight, mudstone, fossile pellets and grains, bioclastic in part, tight, packstone to grainstone with mudstone matrix, abundant white chalky calcite fracture in fill, no show.
- 6980-7010 DOLOMITE-100% Light gray to white, mottled, very fine to medium crystalline, sucrosic texture, hard, dense, tight, fossile pellets and grains, bioclastic in part, tight, packstone to grainstone with mudstone matrix, abundant white chalky calcite fracture in fill, no show.
- 7010-40 DOLOMITE-100% light to medium gray, very fine to microcrystalline, hard, dense, mudstone.
- 7040-70 DOLOMITE-100% Medium to dark gray, light gray, dark gray to black in part, mudstone, light gray to white fracture in fill, pyrite flecks, very fine to microcrystalline, sucrosic texture in part, packstone to wackestone with mudstone matrix.
- 7070-7100 DOLOMITE-100% Medium to dark gray, mudstone, light gray to white fracture in fill, pyrite flecks, very fine to fine crystalline, sucrosic texture in part, packstone to wackestone with mudstone matrix, trace of grains and pellets.

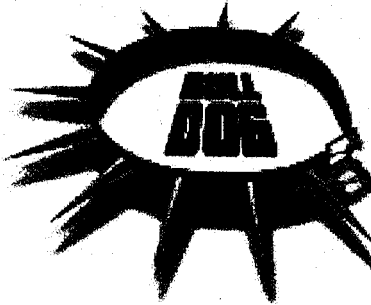
7100-30	DOLOMITE-100% Medium to dark gray, mudstone, light gray to white fracture in fill, pyrite flecks, very fine to fine crystalline, sucrosic texture in part, packstone to wackestone with mudstone matrix, trace of grains and pellets.
7130-60	DOLOMITE-100% light to medium gray, very fine to microcrystalline, hard, dense, mudstone.
7160-90	DOLOMITE-100% Medium to dark gray, mudstone, light gray to white fracture in fill, pyrite flecks, very fine to fine crystalline, sucrosic texture in part, packstone to wackestone with mudstone matrix, trace of grains and pellets.
7190-7220	DOLOMITE-100% Medium to dark gray, mudstone, light gray to white fracture in fill, micropyrritic, very fine cryptocrystalline, sucrosic texture in part, packstone to wackestone with mudstone matrix, trace of grains and pellets.
7220-50	DOLOMITE-100% Medium to dark gray, mudstone, light gray to white fracture in fill, micropyrritic, very fine cryptocrystalline, sucrosic texture in part, packstone to wackestone with mudstone matrix, trace of grains and pellets.
7250-80	DOLOMITE-100% Medium to dark gray, micro-cryptocrystalline, hard, dense, mudstone.
7280-7310	DOLOMITE-100% light to medium gray, very fine to microcrystalline, hard, dense, mudstone, scattered shell fragments.
7310-40	DOLOMITE-100% light to medium gray, very fine to microcrystalline, hard, dense, mudstone, scattered shell fragments.
7340-70	DOLOMITE-100% light gray, sucrosic texture, very fine to fine crystalline, mudstone.
7370-7400	DOLOMITE-100% Medium to dark gray, mudstone, light gray to white fracture in fill, micropyrritic, very fine cryptocrystalline, sucrosic texture in part, packstone to wackestone with mudstone matrix, trace of grains and pellets, hard, tight, no show.
7400-30	DOLOMITE-100% Light gray brown, micro to cryptocrystalline, hard, dense, tight, no show.
7430-60	DOLOMITE-100% Medium to dark gray, mottled, mudstone, light gray to white fracture in fill, micropyrritic, very fine cryptocrystalline, sucrosic

texture in part, packstone to wackestone with mudstone matrix, trace of grains and pellets, hard, tight, no show.

- 7460-90 DOLOMITE-100% Light gray, microcrystalline, hard, dense, mudstone, tight, no show.
- 7490-7520 DOLOMITE-100% Light gray, microcrystalline, hard, dense, micropyrritic, chalky, lithographic, mudstone, tight, no show.
- 7520-50 DOLOMITE-100% Medium to dark gray, light to medium gray in part, very fine to cryptocrystalline, hard, dense, trace fossil fragments, micropyrritic, chalky, lithographic, mudstone, tight, no show.
- 7550-80 DOLOMITE-100% Light to dark gray, mottled, very fine to microcrystalline, hard, dense, micropyrritic, chalky, lithographic, mudstone, calcite fracture in fill, tight, no show.
- 7580-7610 DOLOMITE-100% Light to dark gray, mottled, micro to cryptocrystalline, sharp angular fragments, hard, dense, micropyrritic, chalky, lithographic, mudstone, calcite fracture in fill, tight, no show.
- 7610-40 DOLOMITE-100% Light to medium gray, very fine to microcrystalline, hard, dense, micropyrritic, chalky, lithographic, mudstone, tight, no show.
- 7640-70 DOLOMITE-100% Medium to dark gray, very fine to microcrystalline, hard, dense, trace shell fragments, sucrosic texture, micropyrritic, chalky, lithographic, mudstone, tight, no show.
- 7670-7700 DOLOMITE-100% Dark gray to black, medium to dark gray in part, very fine to microcrystalline, hard, dense, argillaceous, lithographic, mudstone.
- 7700-30 DOLOMITE-100% Dark gray to black, medium to dark gray in part, very fine to microcrystalline, hard, dense, argillaceous, lithographic, mudstone, limey.
- 7730-60 DOLOMITE-100% Dark gray to black, very fine to microcrystalline, hard, dense, argillaceous, lithographic, calcite fracture in fill, mudstone.
- 7760-90 DOLOMITE-100% Dark gray to black, very fine to microcrystalline, hard, dense, argillaceous, lithographic, calcite fracture in fill, mudstone.
- 7790-7820 DOLOMITE-100% Dark gray to black, very fine to microcrystalline, hard, dense, argillaceous, lithographic, calcite fracture in fill, mudstone becoming light to medium gray, micro to cryptocrystalline, sharp angular fragments, conchoidal fracture.

- 7820-50 DOLOMITE-100% Dark gray to black, medium to dark gray, light to medium gray, very fine to microcrystalline, hard, dense, argillaceous, lithographic, calcite fracture in fill, trace fossil fragments, mudstone, with pyrite inclusions.
- 7850-80 DOLOMITE-100% Medium to dark gray, very fine to microcrystalline, calcite fracture in fill, mottled, hard, dense, mudstone.
- 7880-7910 DOLOMITE-100% Medium to dark gray, very fine to microcrystalline, calcite fracture in fill, mottled, hard, dense, mudstone.
- 7910-40 DOLOMITE-100% Medium to dark gray, very fine to microcrystalline, calcite fracture in fill, mottled, hard, dense, mudstone.

CONFIDENTIAL



BULLDOG TESTERS

Box 715
Stanton TX 79782
(575) 390-3070

Operator: Python Ag LLC
Well Name: Rocky Ridge 33-1
Dst Number: 1
Date of Test: 07/19/2010
Date of Report: 07/20/2010

WELL TEST REPORT

Phone: (432) 756-5551
Cell: (575) 390-3070

BULLDOG TESTERS

WELL TEST REPORT

Technical Services
(888) 389-8389

Well Owner: Python Ag LLC
Well Name & Number: Rocky Ridge 33-1
Location: S-33 T-17S R-6W
Test Number: 1
Service Order Number: 9200

Test Interval: 6648'- 6818'
Field: Wildcat
County: Millard
State: Utah
Bulldog Technician: Mark Luna

TEST SEQUENCE					TOOL SEQUENCE				
Description	Date	Time	Pressure	Mcf/D	Component	OD (in)	ID (in)	Length (ft)	Depth (ft)
Set hookwall	07/19/2010	18:59			Drillpipe	4.50	3.826	6151.80	
Set packers		18:59			Drillcollars	6.25	2.25	335.82	
Start flow on 1/8" choke		19:01	0.5"		Circulating sub	6.00	2.25	1.00	
		19:06	0.5"		Drillcollars	6.25	2.25	121.80	
		19:16	0.5"		Crossover sub	6.00	2.25	1.00	
End flow - Start shut in		19:31	0.5"		Shutin tool/Sampler	5.00	0.68	9.56	6611
End shut in		20:31			Hydraulic tool	5.00	1.18	5.21	
Start flow on 1/8" choke		20:31	0.125"		Recorders	5.00	1.12	0.69	6626 / 28
		20:41	0.125"		Jars	5.00	1.87	5.68	
		20:51	0.125"		Packers	8.00	1.50	10.44	6642 / 48
		21:01	0.125"		Perfs	5.00	3.00	11.79	
		21:11	0.125"		Crossover Sub	6.00	2.25	1.29	
		21:21	0.125"		Drillcollars	6.25	2.25	150.53	
End flow - Start shut in		21:31	0.125"		Crossover Sub	6.00	2.25	0.89	
End shut in		23:31			Perfs	5.00	3.00	3.10	
Pulled tool		23:32			Blankoff Sub	5.00	0.00	1.40	
					Packers	8.00	1.50	12.44	6818 / 24
					Hookwall Anchor	8.00	0.00	6.60	6827
					Recorder (Below)	5.00	1.12	3.00	6833
									7944 TD

Report Prepared by: Michael Hudson



BULLDOG TESTERS

WELL TEST REPORT

Well Owner: Python Ag LLC
 Well Name & Number: Rocky Ridge 33-1
 Location: S-33 T-17S R-6W
 Test Number: 1
 Service Order Number: 9200

Test Interval: 6648'- 6818'
 Field: Wildcat
 County: Millard
 State: Utah
 Bulldog Technician: Mark Luna

INSTRUMENT DATA				WELL DATA		
Instrument Number:	70420	75179	71158	Mud Type:	Salt/Flowzan	Mud Wt.: 10.3
Capacity (psig)	10000	10000	10000	Viscosity:	42	Water Loss: 11.0
Depth (ft)	6628	6626	6833	Resistivity of Mud:	.048	
Inside / Outside	Inside	Inside	Below Straddle	Resistivity of Filtrate:	70	
Clock Capacity:	Elec	Elec	Elec	Chlorides:	200,000	
Temperature (f)	195	195		H2S During Test:		
Initial Hydrostatic:	3577	3572		Formation:	Paleozo Dolomite	
Pre-Flow:	37 to 87	33 to 82	Bottom	Net Pay	101'	
Initial Shut-in:	2816	2811	Packer	Elevation:	4604' GL	
2nd Flow:			Seats	Total Measured Depth:	7944'	
2nd Shut-in:			Held	Open Hole Size:	8 3/4"	
Final Flow:	90 to 174	86 to 169	Successfully	Casing Size:	9 5/8"	
Final Shut-in:	2813	2809		Cushion:		
Final Hydrostatic:	3524	3522		Bottom Choke Size:	0.68	

PIPE RECOVERY

279' Drilling mud = 1.19 bbl.

Top Rw: .048 @ 70 deg F/200,000 ppm
 Middle Rw: .048 @ 70 deg F/200,000 ppm
 Bottom Rw: .048 @ 70 deg F/200,000 ppm

SAMPLER REPORT

Total Volume of Sample:	2000	CC	
Pressure in Sampler:	173	Psi	
Gas:	0	Cu.Ft.	
Oil:	0	CC	Gravity:
Water:	0	CC	Resistivity:
Mud:	2000	CC	Resistivity: .048 @ 70 deg F/200,000 ppm

Report Prepared by: Michael Hudson

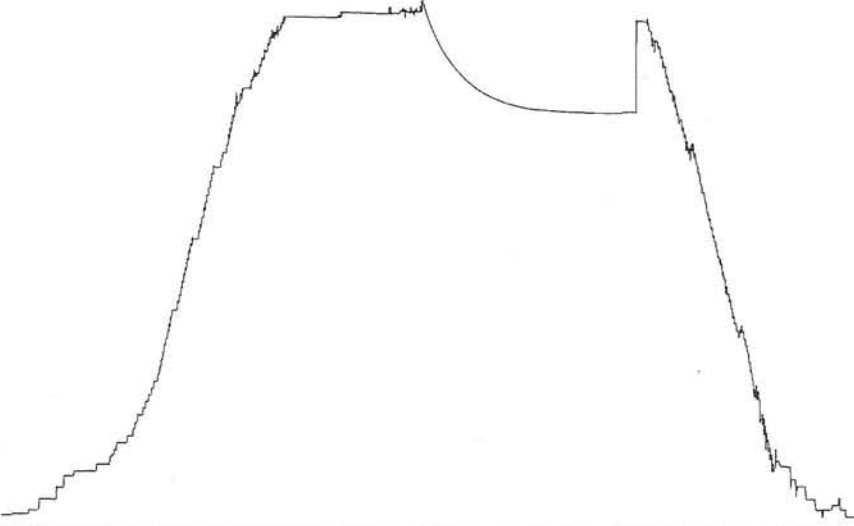


BULLDOG TESTERS

WELL TEST REPORT

Well Owner: Python Ag LLC
 Well Name & Number: Rocky Ridge 33-1
 Location: S-33 T-17S R-6W
 Test Number: 1
 Service Order Number: 9200

Test Interval: 6648'- 6818'
 Field: Wildcat
 County: Millard
 State: Utah
 Bulldog Technician: Mark Luna

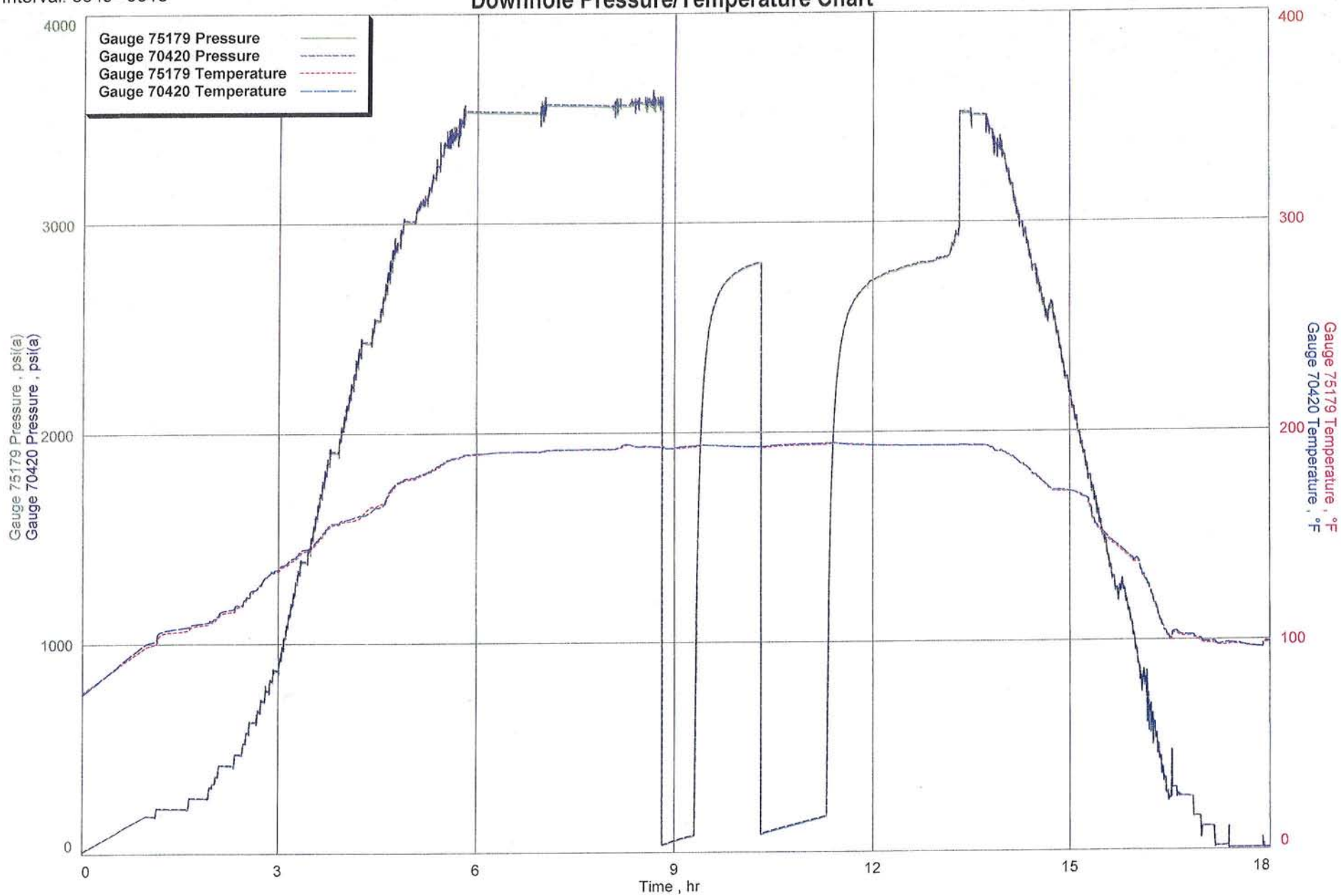
	Gauge Type Electronic No. 71158 Cap. 10000 psi Depth 6833 (Below Straddle) ft. Inside Outside x
	Initial Hydrostatic A Psia Final Hydrostatic K Initial Flow 1 B Final Flow 1 C Initial Flow 2 E Final Flow 2 F Shut-in 1 D Shut-in 2 G Maximum BHT Deg f This data indicates the bottom packer seats held successfully.
	Gauge Type No. Cap. psi Depth ft. Inside Outside
	Initial Hydrostatic A Psia Final Hydrostatic K Initial Flow 1 B Final Flow 1 C Initial Flow 2 E Final Flow 2 F Shut-in 1 D Shut-in 2 G Maximum BHT Deg f



Python Ag LLC
Interval: 6648' - 6818'

Rocky Ridge 33-1, Dst 1
Formation: Paleozo Dolomite

Downhole Pressure/Temperature Chart



Job Number: CA-10373
 Company: Python AG, LLC
 Lease/Well: Rocky Ridge 33-1
 Location: Delta, Utah
 Rig Name: Patterson 77
 RKB:
 G.L. or M.S.L.:

State/Country: Utah, USA
 Declination: 12.31 East
 Grid:
 File name: C:\WINSERVE\OLDJOB~1\PYTHON~1\RR33-1.SVY
 Date/Time: 10-Aug-11 / 08:30
 Curve Name: Survey

CONFIDENTIAL

Crescent Directional Drilling

WINSERVE SURVEY CALCULATIONS

Minimum Curvature Method

Vertical Section Plane .00

Vertical Section Referenced to offset from Wellhead: EW =.00 Ft , NS=.00 Ft

Rectangular Coordinates Referenced to Wellhead

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	N-S FT	E-W FT	Vertical Section FT	CLOSURE Distance FT	CLOSURE Direction Deg	Dogleg Severity Deg/100
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
1273.00	.00	.00	1273.00	.00	.00	.00	.00	.00	.00
1305.00	.50	48.50	1305.00	.09	.10	.09	.14	48.50	1.56
1400.00	.40	29.40	1400.00	.66	.58	.66	.87	41.37	.19
1494.00	.50	354.90	1493.99	1.35	.70	1.35	1.52	27.48	.30
1590.00	.62	15.83	1589.99	2.27	.81	2.27	2.41	19.59	.24
1685.00	.60	12.00	1684.98	3.25	1.05	3.25	3.41	17.92	.05
1780.00	.50	17.10	1779.98	4.13	1.28	4.13	4.32	17.16	.12
1876.00	.40	325.60	1875.98	4.81	1.21	4.81	4.96	14.12	.42
1971.00	1.20	297.30	1970.97	5.54	.14	5.54	5.54	1.43	.91
2066.00	1.50	296.40	2065.94	6.55	-1.86	6.55	6.81	344.15	.32
2161.00	1.80	299.50	2160.90	7.83	-4.27	7.83	8.92	331.40	.33
2257.00	1.80	299.20	2256.85	9.31	-6.90	9.31	11.59	323.46	.01
2352.00	1.50	267.00	2351.82	9.98	-9.44	9.98	13.74	316.57	1.01
2448.00	1.80	244.30	2447.78	9.26	-12.06	9.26	15.20	307.51	.74
2541.00	2.30	235.70	2540.72	7.57	-14.92	7.57	16.73	296.91	.63
2637.00	2.90	208.00	2636.62	4.34	-17.65	4.34	18.17	283.82	1.43
2731.00	2.70	183.30	2730.51	.03	-18.89	.03	18.89	270.09	1.29
2826.00	2.60	174.90	2825.41	-4.35	-18.83	-4.35	19.32	256.99	.42
2921.00	2.80	179.80	2920.31	-8.82	-18.63	-8.82	20.61	244.67	.32
3016.00	2.80	178.40	3015.19	-13.46	-18.56	-13.46	22.92	234.05	.07
3079.00	2.80	179.50	3078.12	-16.53	-18.50	-16.53	24.81	228.21	.09
3111.00	3.10	179.10	3110.08	-18.18	-18.48	-18.18	25.92	225.47	.94
3174.00	1.60	189.00	3173.02	-20.75	-18.59	-20.75	27.86	221.85	2.46
3270.00	1.20	205.00	3268.99	-22.99	-19.22	-22.99	29.97	219.91	.58

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth FT	N-S FT	Vertical E-W FT	CLOSURE Section FT	CLOSURE Distance FT	CLOSURE Direction Deg	CLOSURE Direction Deg/100	Dogleg Severity
3365.00	1.50	203.60	3363.97	-25.03	-20.14	-25.03	32.13	218.83	.32	
3460.00	1.70	219.40	3458.93	-27.26	-21.53	-27.26	34.74	218.31	.51	
3556.00	2.60	229.60	3554.86	-29.77	-24.10	-29.77	38.30	218.99	1.02	
3621.00	1.90	271.60	3619.82	-30.69	-26.30	-30.69	40.42	220.59	2.68	
3682.00	2.40	315.00	3680.78	-29.76	-28.21	-29.76	41.01	223.47	2.71	
3747.00	2.90	337.50	3745.71	-27.28	-29.80	-27.28	40.40	227.53	1.76	
3810.00	3.80	340.50	3808.60	-23.84	-31.11	-23.84	39.19	232.54	1.45	
3873.00	4.10	342.30	3871.45	-19.73	-32.49	-19.73	38.01	238.74	.52	
3924.00	4.00	342.30	3922.32	-16.29	-33.59	-16.29	37.33	244.12	.20	
3995.00	3.10	337.70	3993.19	-12.16	-35.07	-12.16	37.12	250.88	1.33	
4058.00	2.00	327.50	4056.12	-9.66	-36.30	-9.66	37.57	255.11	1.88	
4121.00	.40	293.20	4119.11	-8.64	-37.10	-8.64	38.09	256.89	2.67	
4185.00	.80	189.00	4183.11	-9.00	-37.37	-9.00	38.44	256.47	1.53	
4248.00	1.30	208.70	4246.09	-10.06	-37.78	-10.06	39.10	255.10	.97	
4312.00	1.10	245.40	4310.08	-10.95	-38.69	-10.95	40.21	254.20	1.22	
4377.00	1.10	255.40	4375.07	-11.37	-39.86	-11.37	41.45	254.09	.29	
4440.00	1.50	317.30	4438.06	-10.91	-41.01	-10.91	42.43	255.10	2.19	
4504.00	1.10	306.60	4502.04	-9.93	-42.07	-9.93	43.22	256.72	.73	
4567.00	.90	295.70	4565.03	-9.36	-43.00	-9.36	44.01	257.73	.44	
4631.00	.80	258.80	4629.02	-9.22	-43.89	-9.22	44.85	258.13	.85	
4694.00	1.20	244.20	4692.01	-9.60	-44.92	-9.60	45.93	257.94	.75	
4757.00	1.80	241.30	4754.99	-10.36	-46.38	-10.36	47.52	257.41	.96	
4818.00	2.60	198.30	4815.95	-12.13	-47.65	-12.13	49.17	255.72	2.91	
4881.00	1.80	175.30	4878.90	-14.48	-48.02	-14.48	50.15	253.22	1.87	
4946.00	.30	289.70	4943.89	-15.44	-48.10	-15.44	50.51	252.21	2.99	
5009.00	.20	152.20	5006.89	-15.48	-48.20	-15.48	50.63	252.20	.74	
5073.00	.30	133.40	5070.89	-15.69	-48.03	-15.69	50.53	251.91	.20	
5135.00	.50	151.20	5132.89	-16.04	-47.78	-16.04	50.40	251.44	.38	
5199.00	.70	122.30	5196.89	-16.49	-47.31	-16.49	50.11	250.78	.56	
5262.00	.80	120.10	5259.88	-16.92	-46.61	-16.92	49.58	250.05	.17	
5326.00	1.10	113.00	5323.87	-17.38	-45.66	-17.38	48.85	249.16	.50	
5389.00	1.30	121.30	5386.86	-17.99	-44.49	-17.99	47.99	247.98	.42	
5453.00	.40	277.20	5450.86	-18.34	-44.09	-18.34	47.75	247.41	2.61	
5516.00	1.00	269.30	5513.85	-18.32	-44.86	-18.32	48.45	247.79	.96	

5580.00	.40	29.50	5577.85	-18.13	-45.31	-18.13	48.80	248.19	1.95
5643.00	1.50	86.30	5640.84	-17.89	-44.38	-17.89	47.84	248.05	2.10
5707.00	1.10	169.40	5704.83	-18.44	-43.43	-18.44	47.18	247.00	2.73
5770.00	1.20	177.40	5767.81	-19.69	-43.29	-19.69	47.55	245.54	.30
5833.00	1.00	251.00	5830.81	-20.53	-43.78	-20.53	48.35	244.88	2.11
5897.00	1.20	274.20	5894.79	-20.66	-44.97	-20.66	49.49	245.32	.76
5960.00	3.00	77.50	5957.77	-20.26	-44.02	-20.26	48.46	245.29	6.61
6024.00	3.30	89.30	6021.68	-19.87	-40.54	-19.87	45.15	243.89	1.11

PAGE - 2

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	N-S FT	Vertical E-W FT	CLOSURE Section FT	CLOSURE Distance FT	CLOSURE Direction Deg	Dogleg Severity Deg/100
6087.00	1.90	119.40	6084.61	-20.36	-37.82	-20.36	42.95	241.70	3.03
6150.00	2.20	220.30	6147.59	-21.80	-37.69	-21.80	43.54	239.96	5.03
6213.00	2.60	223.10	6210.53	-23.76	-39.45	-23.76	46.05	238.94	.66
6276.00	1.80	220.10	6273.49	-25.56	-41.06	-25.56	48.37	238.10	1.28
6340.00	1.00	15.10	6337.48	-25.79	-41.57	-25.79	48.92	238.18	4.28
6403.00	3.30	28.30	6400.43	-23.66	-40.56	-23.66	46.96	239.74	3.71
6467.00	1.00	76.80	6464.38	-21.92	-39.15	-21.92	44.86	240.76	4.28
6530.00	1.50	134.70	6527.37	-22.37	-38.02	-22.37	44.12	239.53	2.04
6593.00	1.80	253.50	6590.36	-23.23	-38.39	-23.23	44.87	238.82	4.52
6657.00	2.00	259.30	6654.32	-23.72	-40.45	-23.72	46.89	239.61	.43
6720.00	2.00	73.70	6717.31	-23.62	-40.47	-23.62	46.86	239.73	6.34
6784.00	3.90	77.30	6781.22	-22.83	-37.28	-22.83	43.71	238.52	2.98
6847.00	2.30	96.70	6844.13	-22.50	-33.93	-22.50	40.72	236.45	3.00
6910.00	1.60	124.30	6907.09	-23.15	-31.95	-23.15	39.45	234.08	1.83
6974.00	1.90	192.70	6971.07	-24.69	-31.44	-24.69	39.98	231.87	3.10
7039.00	2.20	232.20	7036.03	-26.50	-32.67	-26.50	42.07	230.95	2.17
7104.00	1.20	314.50	7101.01	-26.79	-34.14	-26.79	43.39	231.88	3.63
7166.00	1.60	340.50	7162.99	-25.52	-34.89	-25.52	43.23	233.82	1.19
7229.00	1.80	341.40	7225.96	-23.75	-35.50	-23.75	42.71	236.22	.32
7293.00	2.20	349.10	7289.92	-21.59	-36.05	-21.59	42.02	239.08	.75
7356.00	.40	345.90	7352.90	-20.19	-36.33	-20.19	41.57	240.94	2.86
7419.00	1.10	144.70	7415.90	-20.47	-36.04	-20.47	41.45	240.40	2.35
7482.00	1.30	157.90	7478.89	-21.63	-35.42	-21.63	41.50	238.59	.54
7546.00	1.70	150.80	7542.87	-23.13	-34.68	-23.13	41.69	236.30	.69
7609.00	1.80	148.80	7605.84	-24.79	-33.72	-24.79	41.85	233.67	.19

7673.00	2.20	160.30	7669.80	-26.81	-32.78	-26.81	42.35	230.73	.88
7736.00	2.30	160.30	7732.75	-29.14	-31.95	-29.14	43.24	227.64	.16
7799.00	2.60	152.10	7795.69	-31.59	-30.85	-31.59	44.16	224.32	.73
7863.00	3.00	136.20	7859.62	-34.08	-29.01	-34.08	44.76	220.41	1.36
Projection to Bit									
7943.00	3.30	136.20	7939.50	-37.25	-25.97	-37.25	45.41	214.88	.37

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		FORM 9			
SUNDRY NOTICES AND REPORTS ON WELLS Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		5. LEASE DESIGNATION AND SERIAL NUMBER: 00172361			
1. TYPE OF WELL Oil Well		6. IF INDIAN, ALLOTTEE OR TRIBE NAME: 			
2. NAME OF OPERATOR: PYTHON AG, LLC		7. UNIT or CA AGREEMENT NAME: 			
3. ADDRESS OF OPERATOR: 717 Alvarado Ave , Davis, CA, 95616		8. WELL NAME and NUMBER: ROCKY RIDGE 33-1			
4. LOCATION OF WELL FOOTAGES AT SURFACE: 0375 FNL 1054 FWL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NWNW Section: 33 Township: 17.0S Range: 06.0W Meridian: S		9. API NUMBER: 43027500010000			
PHONE NUMBER: 530 220-3463 Ext		9. FIELD and POOL or WILDCAT: WILDCAT			
COUNTY: MILLARD		STATE: UTAH			
11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA					
TYPE OF SUBMISSION	TYPE OF ACTION				
<input checked="" type="checkbox"/> NOTICE OF INTENT Approximate date work will start: 12/6/2011 <input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion: <input type="checkbox"/> SPUD REPORT Date of Spud: <input type="checkbox"/> DRILLING REPORT Report Date:	<table style="width: 100%; border: none;"> <tr> <td style="width: 33%; vertical-align: top;"> <input type="checkbox"/> ACIDIZE <input type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> DEEPEN <input type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PRODUCTION START OR RESUME <input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> WILDCAT WELL DETERMINATION </td> <td style="width: 33%; vertical-align: top;"> <input type="checkbox"/> ALTER CASING <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> FRACTURE TREAT <input checked="" type="checkbox"/> PLUG AND ABANDON <input checked="" type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> SI TA STATUS EXTENSION <input type="checkbox"/> OTHER </td> <td style="width: 33%; vertical-align: top;"> <input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CONVERT WELL TYPE <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> PLUG BACK <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION <input type="checkbox"/> TEMPORARY ABANDON <input type="checkbox"/> WATER DISPOSAL <input type="checkbox"/> APD EXTENSION OTHER: complete approved P&A </td> </tr> </table>		<input type="checkbox"/> ACIDIZE <input type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> DEEPEN <input type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PRODUCTION START OR RESUME <input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> ALTER CASING <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> FRACTURE TREAT <input checked="" type="checkbox"/> PLUG AND ABANDON <input checked="" type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> SI TA STATUS EXTENSION <input type="checkbox"/> OTHER	<input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CONVERT WELL TYPE <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> PLUG BACK <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION <input type="checkbox"/> TEMPORARY ABANDON <input type="checkbox"/> WATER DISPOSAL <input type="checkbox"/> APD EXTENSION OTHER: complete approved P&A
<input type="checkbox"/> ACIDIZE <input type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> DEEPEN <input type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PRODUCTION START OR RESUME <input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> ALTER CASING <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> FRACTURE TREAT <input checked="" type="checkbox"/> PLUG AND ABANDON <input checked="" type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> SI TA STATUS EXTENSION <input type="checkbox"/> OTHER	<input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CONVERT WELL TYPE <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> PLUG BACK <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION <input type="checkbox"/> TEMPORARY ABANDON <input type="checkbox"/> WATER DISPOSAL <input type="checkbox"/> APD EXTENSION OTHER: complete approved P&A			
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc. Sundry Intent for PxA dated 12/11/2010 was approved and actual work commenced on 12/17/2010. Operator suspended P&A operations on 12/19/2010 prior to the placement of the final cement plug of 475 sx cement to be circulated thru perfs at 1370'. It is now proposed to complete the PxA as previously approved as soon as possible and winter weather conditions allow.					
NAME (PLEASE PRINT) Steven R. Hash		PHONE NUMBER 918 599-9400			
SIGNATURE N/A		TITLE Consulting Engineer (Agent)			
DATE 12/6/2011		DATE: 12/08/2011 By:			

Please Review Attached Conditions of Approval



The Utah Division of Oil, Gas, and Mining

- State of Utah
- Department of Natural Resources

Electronic Permitting System - Sundry Notices

Sundry Conditions of Approval Well Number 43027500010000

- 1. Notify the Division at least 24 hours prior to conducting abandonment operations.
Please call Dan Jarvis at 801-538-5338.**
- 2. Previous conditions of approval still apply.**

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		FORM 9
SUNDRY NOTICES AND REPORTS ON WELLS Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		5. LEASE DESIGNATION AND SERIAL NUMBER: 00172361
1. TYPE OF WELL		6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
2. NAME OF OPERATOR: PYTHON AG, LLC		7. UNIT or CA AGREEMENT NAME:
3. ADDRESS OF OPERATOR: 717 Alvarado Ave , Davis, CA, 95616		8. WELL NAME and NUMBER: ROCKY RIDGE 33-1
4. LOCATION OF WELL FOOTAGES AT SURFACE: 0375 FNL 1054 FWL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NWNW Section: 33 Township: 17.0S Range: 06.0W Meridian: S		9. API NUMBER: 43027500010000
PHONE NUMBER: 530 220-3463 Ext		9. FIELD and POOL or WILDCAT: WILDCAT
COUNTY: MILLARD		STATE: UTAH
11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA		
TYPE OF SUBMISSION	TYPE OF ACTION	
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:	<input type="checkbox"/> ACIDIZE	
<input checked="" type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion: 6/5/2012	<input type="checkbox"/> ALTER CASING	
<input type="checkbox"/> SPUD REPORT Date of Spud:	<input type="checkbox"/> CASING REPAIR	
<input type="checkbox"/> DRILLING REPORT Report Date:	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	
	<input type="checkbox"/> CHANGE WELL STATUS	
	<input type="checkbox"/> CHANGE TUBING	
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	
	<input type="checkbox"/> DEEPEN	
	<input type="checkbox"/> FRACTURE TREAT	
	<input checked="" type="checkbox"/> PLUG AND ABANDON	
	<input type="checkbox"/> NEW CONSTRUCTION	
	<input type="checkbox"/> OPERATOR CHANGE	
	<input type="checkbox"/> PLUG BACK	
	<input type="checkbox"/> PRODUCTION START OR RESUME	
	<input type="checkbox"/> RECLAMATION OF WELL SITE	
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	
	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	
	<input type="checkbox"/> TEMPORARY ABANDON	
	<input type="checkbox"/> TUBING REPAIR	
	<input type="checkbox"/> VENT OR FLARE	
	<input type="checkbox"/> WATER DISPOSAL	
	<input type="checkbox"/> WATER SHUTOFF	
	<input type="checkbox"/> SI TA STATUS EXTENSION	
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	
	<input type="checkbox"/> OTHER: <input style="width: 100px;" type="text"/>	
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc. Report of Plug & Abandonment completed on 6/5/2012; place final cement plug in and out of production casing and circulate to surface as follows. 9-5/8" surface casing set at 1270' & cemented to surface during original drilling. Established circ to surface on 9-5/8" x 5-1/2" annulus with 40 bbls of fresh water through perforations in 5-1/2" casing at 1370'. Rig cementers to 5-1/2" casing, mixed & pumped 600 sx of Class G cement at 15.8ppg, 1.15 cfps and 5 gwps (122 bbls slurry). Full circ, circulated 20 bbls slurry to pit, displaced with 1 bbl freshwater, shut down, all cement stayed in place. Cement plug 1370' to 5' BGL. WOC. Cut off wellhead and welded on 9-5/8" cap plate with API# 43-027-50001, date & S33-T17S-R6W. Plugged R&M, backfill, Well P&A 6/5/2012. Will reclaim reserve pit & location summer 2012. Witnessed by Ted Smith, UDOGM field inspector.		
Accepted by the Utah Division of Oil, Gas and Mining FOR RECORD ONLY June 21, 2012		
NAME (PLEASE PRINT) Steven R. Hash	PHONE NUMBER 918 599-9400	TITLE Consulting Engineer (Agent)
SIGNATURE N/A	DATE 6/14/2012	

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		FORM 9
SUNDRY NOTICES AND REPORTS ON WELLS Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		5. LEASE DESIGNATION AND SERIAL NUMBER: 00172361
1. TYPE OF WELL		6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
2. NAME OF OPERATOR: PYTHON AG, LLC		7. UNIT or CA AGREEMENT NAME:
3. ADDRESS OF OPERATOR: 717 Alvarado Ave , Davis, CA, 95616		8. WELL NAME and NUMBER: ROCKY RIDGE 33-1
4. LOCATION OF WELL FOOTAGES AT SURFACE: 0375 FNL 1054 FWL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NWNW Section: 33 Township: 17.0S Range: 06.0W Meridian: S		9. API NUMBER: 43027500010000
PHONE NUMBER: 530 220-3463 Ext		9. FIELD and POOL or WILDCAT: WILDCAT
COUNTY: MILLARD		STATE: UTAH
11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA		
TYPE OF SUBMISSION	TYPE OF ACTION	
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:	<input type="checkbox"/> ACIDIZE	
<input checked="" type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion: 9/14/2012	<input type="checkbox"/> ALTER CASING	
<input type="checkbox"/> SPUD REPORT Date of Spud:	<input type="checkbox"/> CASING REPAIR	
<input type="checkbox"/> DRILLING REPORT Report Date:	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	
	<input type="checkbox"/> CHANGE WELL STATUS	
	<input type="checkbox"/> CHANGE WELL NAME	
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	
	<input type="checkbox"/> CONVERT WELL TYPE	
	<input type="checkbox"/> DEEPEN	
	<input type="checkbox"/> FRACTURE TREAT	
	<input type="checkbox"/> NEW CONSTRUCTION	
	<input type="checkbox"/> OPERATOR CHANGE	
	<input type="checkbox"/> PLUG AND ABANDON	
	<input type="checkbox"/> PLUG BACK	
	<input type="checkbox"/> PRODUCTION START OR RESUME	
	<input checked="" type="checkbox"/> RECLAMATION OF WELL SITE	
	<input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION	
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	
	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	
	<input type="checkbox"/> TEMPORARY ABANDON	
	<input type="checkbox"/> TUBING REPAIR	
	<input type="checkbox"/> VENT OR FLARE	
	<input type="checkbox"/> WATER DISPOSAL	
	<input type="checkbox"/> WATER SHUTOFF	
	<input type="checkbox"/> SI TA STATUS EXTENSION	
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	
	<input type="checkbox"/> OTHER: 	
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc. On 9/14/2012 the referenced wellsite and pit area was completely restored to near original condition and to satisfaction of surface landowner. Python AG, Operator, is surface landowner. FINAL REPORT		
Accepted by the Utah Division of Oil, Gas and Mining Date: <u>October 26, 2012</u> By: <u></u>		
NAME (PLEASE PRINT) Steven R. Hash	PHONE NUMBER 918 599-9400	TITLE Consulting Engineer (Agent)
SIGNATURE N/A	DATE 9/27/2012	